

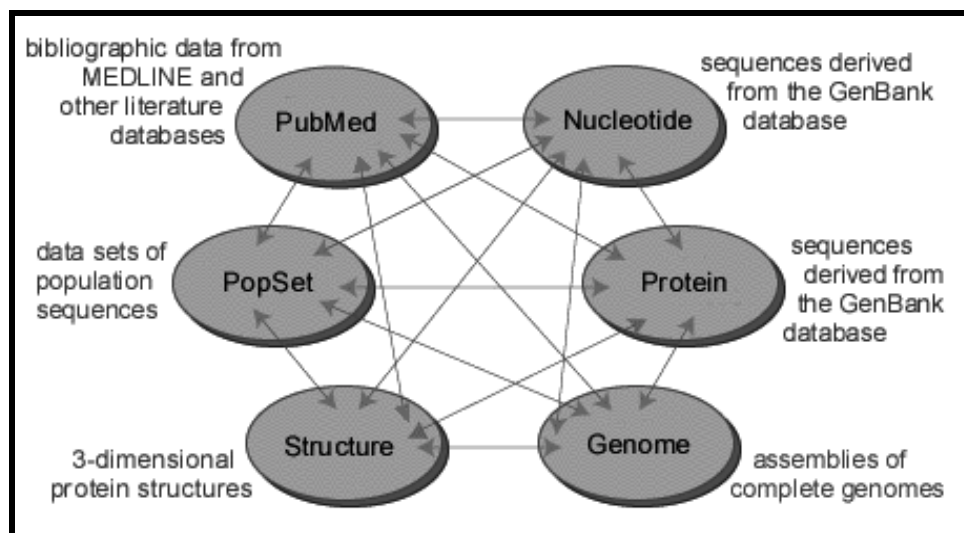


(<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>)

- PubMed is a World Wide Web (WWW) retrieval service developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM).
- PubMed is one of several databases under NCBI's Entrez retrieval system.
- PubMed provides access, free of charge, to MEDLINE, a database of over 11 million bibliographic citations, PREMEDLINE™, and other related databases.
- PubMed also contains links to the full-text versions of articles at participating publishers' Web sites, biological data, sequence centers, etc. from third parties
- PubMed provides access and links to the integrated molecular biology databases maintained by NCBI. These databases contain: DNA and protein sequences, genome mapping data, and 3-D protein structures, aligned sequences from populations, and the Online Mendelian Inheritance in Man (OMIM).

Interrelationships between Entrez Databases

- Links between MEDLINE records and sequence records make it easy to look up MEDLINE abstracts associated with sequence records and vice versa.
- The following diagram illustrates the relationships between the information resources in Entrez:



Publisher Supplied Citations

- These are citations that are electronically supplied by publishers and sent directly to PubMed. The citations are then forwarded to NLM's Indexing Section to be added to PREMEDLINE.
- Citations received electronically have the tag: **[Record as supplied by publisher]** and a PubMed Unique Identifier (PMID).
- Once the record becomes a PREMEDLINE citation, the **[MEDLINE record in process]** tag replaces **[Record as supplied by publisher]** tag. Once the MEDLINE record is finished, the **[MEDLINE record in process]** is removed.

Sample PubMed citation that has been electronically submitted but is not yet in PREMEDLINE:

*Notice the
[Record as supplied
by publisher] tag.*

*Notice the PubMed
Unique Identifier (PMID).*

┐ Azuma N, et al
Cloning, expression and map assignment of chicken prosaposin.
Biochem J. 1998 Feb 15; 330(1): 321-327.
[Record as supplied by publisher]
PMID: 9461526.

PREMEDLINE

- MEDLINE in-process records providing basic citation information and abstracts **before** the citation is indexed with NLM's MeSH headings and NLM's quality assurance staff have checked it for errors.
- PREMEDLINE records carry the tag: [**MEDLINE record in process**].
- New records are added to PREMEDLINE Tuesday-Saturday.
- After MeSH terms, Publication Types, and other indexing data are added, these PREMEDLINE citations graduate to MEDLINE records. These "completed" records are also checked for accuracy.

Sample of a PREMEDLINE citation in PubMed:

*Notice the [MEDLINE
record in process] tag.*

Notice the PMID.

Azuma N, et al.
Cloning, expression and map assignment of chicken prosaposin.
Biochem J. 1998 Feb 15; 330(Pt 1): 321-327.
[MEDLINE record in process]
PMID: 9461526; UI: 98129745.

MEDLINE

- NLM's premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, the preclinical sciences, and some other areas of the life sciences.
- Contains bibliographic citations and author abstracts from more than 4,300 current biomedical journals published in the United States and 70 other countries. Coverage is worldwide, but most records are from English-language sources or have English abstracts. Approximately 76% of MEDLINE records include abstracts as they appear in the journal.
- There are currently 11 million records dating from 1966 to present. MEDLINE is updated weekly and records are incorporated into PubMed weekly.
- Each MEDLINE record is assigned a PubMed unique identifier (PMID).

Sample MEDLINE citation in PubMed:

☐ 1: *Biochem J* 1998 Feb 15;330 (Pt 1):321-7
 [Related Articles, Books, Protein, Nucleotide, LinkOut](#)

Biochem J

Cloning, expression and map assignment of chicken prosaposin.

Azuma N, Seo HC, Lie O, Fu Q, Gould RM, Hiraiwa M, Burt DW, Paton IR, Morrice DR, O'Brien JS, Kishimoto Y

University of California, San Diego, Department of Neurosciences, Center for Molecular Genetics, 0634J, La Jolla, CA 92093, USA.

Prosaposin is the precursor of four small glycoproteins, saposins A-D, that activate lysosomal sphingolipid hydrolysis. A full-length cDNA encoding prosaposin from chicken brain was isolated by PCR. The deduced amino acid sequence predicted that, similarly to human and other mammalian species studied, chicken prosaposin contains 518 residues, including four domains that correspond to saposins A-D. There was 59% identity and 76% similarity of human and chicken prosaposin amino acid sequences. The basic three-dimensional structures of these saposins is predicted to be similar on the basis of the conservation of six cysteine residues and an N-glycosylation site. Identity of amino acid sequences was higher among saposins A, B and D than in saposin C. The predicted amino acid sequence of saposin B matched exactly that of purified chicken saposin B protein. The chicken prosaposin gene was mapped to a single locus, PSAP, in chicken linkage group E11C10 and is closely linked to the ACTA2 locus. This confirms the homology between chicken and human prosaposins and defines a new conserved segment with human chromosome 10q21-q24.

MeSH Terms:

- Actins/genetics
- Amino Acid Sequence
- Animal
- Base Sequence
- Chickens/genetics*
- Chromosome Mapping
- Cloning, Molecular
- Comparative Study
- Glycoproteins/genetics*
- Human
- Linkage (Genetics)
- Liver/enzymology
- Mice
- Molecular Sequence Data
- Polymorphism (Genetics)
- Rats
- Sequence Alignment
- Sequence Homology, Amino Acid
- Support, Non-U.S. Gov't
- Support, U.S. Gov't, P.H.S.

Substances:

- testibumin
- Glycoproteins
- Actins

Secondary source id:

- GENBANK/AB003471

Grant support:

- NS13559/NS/NINDS
- NS08682/NS/NINDS

PMID: 9461526

Other Publisher Supplied Citations

- Some of the citations received electronically from publishers may never become MEDLINE citations.
- These records are assigned Unique Identifiers but are never assigned MeSH terms because they never go through the indexing process.
- These records will carry the notation **[Record as supplied by publisher]**.
- These records remain forever in PubMed even though they are not technically MEDLINE citations.
- There are three sources of these types of records:

1. Out-of-scope articles from a selectively indexed MEDLINE journal

- This may occur when a particular article in a selectively indexed journal is out-of-scope for MEDLINE (such as a geology article in a general scientific journal like *Science* or *Nature*), **and** the publisher provides PubMed with electronic information for the entire journal.

Sample of an out-of-scope article from a selectively indexed electronically submitted MEDLINE journal that remains in PubMed:

Notice the
publisher-
supplied tag and
the PubMed
Unique Identifier
(PMID).

☐ 1 : [Arrigo KR, et al](#)
[Primary Production in Antarctic Sea Ice].
Science. 1997 Apr 18;276(5311):394-7.
[Record as supplied by publisher]
PMID: 9103193

Sample citation from the same selectively indexed electronically submitted journal that is indexed for MEDLINE:

Notice that
there is no tag
for this
citation.

1: [Achatz G, Nitschke L, Lamers MC](#) Related Articles
Effect of transmembrane and cytoplasmic domains of IgE on the IgE
response.
Science. 1997 Apr 18;276(5311):409-11.
PMID: 9103198

2. Citations from back issues of newly-indexed MEDLINE journals

- If publishers choose to supply NLM with electronic data from back issues of newly-indexed MEDLINE journals, those citations will be entered into PubMed.
- These earlier citations will have no MeSH headings.

Example: NLM began indexing the journal, *Molecular Diagnosis* with v. 4, no. 1, 1999. However, the publisher has supplied us with citations from earlier issues. These earlier citations from back issues have been entered into PubMed but will never be indexed with MeSH headings.

Notice that
this citation
is from
volume 2, 1997.

☐ **23** : [Dhir R, et al.](#)
CD44 Expression in Benign and Neoplastic Human Prostates.
Mol Diagn. 1997 Sep;2(3):197-204.
[Record as supplied by publisher]
PMID: 10462610

PubMed's Home Page

The Sidebar



Entrez PubMed

- The **Overview** provides a detailed description of the PubMed database including database coverage and PubMed journal information.
- Click on **Help** to get detailed descriptions of all the features and search and retrieval options within PubMed. **FAQs** are frequently asked questions about PubMed.
- The **New/Noteworthy** link provides information about recent and future PubMed system enhancements.

PubMed Services

- Use the **Journal Browser** to search for journals by journal title, title abbreviation, or the International Standard Serial Number (ISSN). The list of journals with links to full-text is also included in the browser.
- The **MeSH Browser** allows you to browse the MeSH Vocabulary in a hierarchical structure.
- The **Single Citation Matcher** is a fill-in-the-blank form that allows users to enter journal citation information to locate a specific single article, issue's content, or entire journal's content.
- The **Batch Citation Matcher** is primarily a tool for publishers. It allows publishers to retrieve the PubMed IDs for many articles all at once. This feature requires that bibliographic information (journal, volume, page) are entered in a specific format.
- The **Clinical Queries** page was designed for clinicians and has built-in search "filters" that focus retrieval in four study categories: therapy, diagnosis, etiology, and prognosis.
- The **Cubby** stores search strategies, that may be updated at any time, and LinkOut preferences to specify which LinkOut providers you want displayed in PubMed.

Related Resources

- **Order Documents** is a link to the Loansome Doc feature that allows users to order full-text copies of articles from a local medical library (local fees and delivery methods may vary).
- Click on the **Grateful Med** link to access NLM's other Web-based service which also provides access to MEDLINE and additional NLM databases (e.g., AIDSLINE, HISTLINE, etc.).
- **Consumer Health** is a link to MEDLINEplus, the National Library of Medicine's Web site for consumer health information.
- **Clinical Alerts** expedite the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity and mortality.
- Click on **ClinicalTrials.gov** to access the NIH/NLM Web site for current information about clinical research studies.

Privacy Policy

The National Center for Biotechnology Information's Privacy Policy for PubMed users.

The Footnote

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
[Department of Health & Human Services](#)
[Freedom of Information Act](#) | [Disclaimer](#)

- Click on **Write to the Help Desk** to send an e-mail message to NLM Customer Service.
- Click on **NCBI**, **NLM**, **NIH** or **Department of Health & Human Services** to access the Web pages of the agencies responsible for the creation and maintenance of PubMed.
- Click on **Freedom of Information Act** (FOIA) to access the NIH FOIA Home Page.
- Click on **Disclaimer** to obtain information on copyright status, disclaimer of liability and endorsement, and NLM downloading policy.

Searching With PubMed

PubMed provides a variety of search modes to meet users' individual needs. You can run a simple search by entering a few search terms in the query box or construct complex search strategies using Boolean commands and using the various functions provided by the Features bar.

PubMed's Features bar provides additional search options:

- **Limits**
- **Preview/Index**
- **History**
- **Clipboard**

In addition, these search features are also available:

- **The MeSH Browser**
- **Clinical Queries**
- **The Journal Browser**
- **The Single Citation Matcher**



Take Note:

PubMed makes use of **cookies** and **JavaScript** from your Web browser for several functions. Please enable cookies and JavaScript from your Web browser. These selections may be found under the Edit menu, and then under Preferences (Netscape), or the Tools menu under Internet Options (Internet Explorer). For more information about cookies, see PubMed's FAQs.

How it Works

Subject Searching

Search Request: *Find citations to articles about gallstones and pain.*



The image shows a screenshot of the PubMed search interface. It features a search bar with the text 'gallstones pain' entered. To the left of the search bar is a dropdown menu set to 'PubMed'. To the right of the search bar are 'Go' and 'Clear' buttons. Below the search bar is a navigation bar with links for 'Limits', 'Preview/Index', 'History', and 'Clipboard'.

Entering Search Terms

- Enter significant terms in the query box (e.g., *gallstones pain*).
- Click on the **Go** button.
- Use the **Clear** button to erase the contents of the query box.

What is searched?

- PubMed uses **Automatic Term Mapping**

Unqualified terms that are entered in the query box are matched against (in this order):

- MeSH (Medical Subject Headings) Translation Table
- Journals Translation Table
- Phrase List
- Author Index

1. MeSH Translation Table contains:

- MeSH Terms
 - Subheadings
 - See-Reference mappings (also known as entry terms) for MeSH Heading terms
 - Mappings derived from the Unified Medical Language System (UMLS) that have equivalent synonyms or lexical variants in English
 - Names of Substances and synonyms to the Names of Substances
- If a match is found in this translation table, the term will be mapped to the appropriate MeSH term and searched as MeSH **and** as a Text Word.

Example:

| | |
|------------|--|
| gallstones | |
|------------|--|

PubMed Translation: ("cholelithiasis"[MeSH Terms] OR gallstones[Text Word])

- Gallstones is an entry term for the MeSH term Cholelithiasis.

2. Journals Translation Table contains:

- Full journal title
- MEDLINE abbreviation
- International Standard Serial Number (ISSN)

Example:

| |
|---------------------------------|
| new england journal of medicine |
|---------------------------------|

PubMed Translation: "N Engl J Med"[Journal Name]

**Search Tip:**

If a journal name is also a MeSH heading, PubMed will search the unqualified term both as a MeSH heading and as a Text Word. However, the search will **not** include the term as a journal name. For example, the search for Science unqualified will not search for citations from the journal, *Science*.

3. Phrase List

If no match is found in the MeSH or Journals Translation Tables, PubMed consults a phrase list containing several hundred thousand phrases generated from:

- MeSH
- Unified Medical Language System (UMLS)
- Names of Substances

Example:

cold compresses

PubMed Translation: cold compresses [All Fields]

- PubMed does not find this phrase in the MeSH Translation Table or the Journal Translation Table, but does find it in the Phrase List.

4. Author Index

- If the phrase is not found in the MeSH or Journal Translation Tables or the Phrase List **and** is a word with one or two letters after it, PubMed then checks the Author Index.
- Enter the author's name in the form of Last Name (space) Initials:

o'brien jm
adams sh
pogonka t

- PubMed automatically truncates the author's name to account for varying initials.

Query Box:A screenshot of a web search interface. It features a rectangular text input field with a thin border. Inside the field, the text "o'brien j" is entered. To the right of the text field is a small, rectangular button with the word "Go" written on it.

- If only an author's last name is entered, PubMed will search that name in All Fields (Author field plus all other searchable fields). It will not default to the Author Index because the last name is not followed by initial(s).

If no match is found?

- PubMed breaks apart the phrase and repeats the above process until a match is found.
- If there is no match, the individual terms will be combined (ANDed) together and searched in All Fields.

Example:A screenshot of a web search interface. It features a rectangular text input field with a thin border. Inside the field, the text "pressure point" is entered. To the right of the text field is a small, rectangular button with the word "Go" written on it.**PubMed Translation:**

(pressure [MeSH Terms] OR pressure [Text Word]) AND point [All Fields])

PubMed breaks apart a long phrase from right to left:

Example:

head lice shampoo

Searches for:

head lice shampoo

head lice

shampoo

Results:

No match found

Match found in MeSH
Translation Table

No match found
Translation Table

Action:

Removes term on right to re-run Automatic
Term Mapping process.

head lice will be searched as
***Pediculus[MeSH Terms] OR head lice[Text
Word]***

shampoo will be searched as ***shampoo[All
Fields]***

PubMed then combines (ANDs) the found matches to produce a single search strategy:

(pediculus[MeSH Terms] OR head lice[Text Word])

AND

shampoo[All Fields]



If there is no match, PubMed will then start the Automatic Term Mapping process from left to right. The individual terms with no match will be combined (ANDed) together and processed through the Automatic Term Mapping as single terms.

Take Note:

Phrase Searching (forcing PubMed to search for a phrase)

- PubMed does not actually perform adjacency searching but uses a list of recognized phrases, the Phrase List, against which search terms are matched. PubMed may fail to find a phrase because it is not in the Phrase List.
- The use of quotes around a phrase forces PubMed to check PubMed's Index to attempt to find the phrase. The Index contains several million phrases generated from:
 - citation titles & abstracts
 - UMLS
 - MeSH vocabulary

Example:



PubMed Translation:

("pressure"[MeSH Terms] OR pressure[Text Word]) AND point[All Fields]

- PubMed does not recognize this as a phrase. PubMed searches for “pressure” and “point” separately.

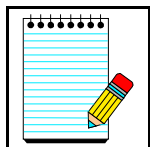


To force PubMed to search for a specific phrase enter double quotes (" ") around the phrase.

Search Tip:



- Your phrase may actually appear in the citation and abstract data, but may **not** appear in *either* the Phrase List or the Index. If this is the case, then the double quotes are ignored and the phrase is processed using automatic term mapping.



Take Note:

When you enclose a phrase in double quotes, PubMed will **not** perform automatic term mapping which includes explosions of MeSH terms. For example, "health planning" **will** include citations that are indexed to the MeSH heading, Health Planning, but **will not** include the more specific indentations, e.g., Health Care Rationing, Health Care Reform, etc., that are included with automatic MeSH mapping and explosion.

Truncation (finding all terms that begin with a given text string):

- Place an asterisk (*) at the end of a term to search for all terms that begin with that word. The asterisk may only be used at the **end** of a string of characters.

Example: mimick* will find all terms that begin with the letters mimick; e.g., mimick, mimicked, mimicks, mimicking, etc.

- PubMed uses the first 150 variations of a truncated term. If a truncated term, e.g., staph*, produces more than 150 variations, PubMed displays the following warning message on the Results screen in a pink area near the top of the screen:

Warnings: Wildcard search for 'term*' used only the first 150 variations. Lengthen the root word to search for all endings.

1. PubMed has no single character truncation.
2. PubMed processes up to 150 variations of a truncated term.
3. PubMed **does not** cross a space boundary. Phrases that include a space in a word after the asterisk will **not** be included; for example, "infection*" includes "infections," but not "infection control."
4. Truncation turns off automatic term mapping. For example, heart attack* will not map to the MeSH term, Myocardial Infarction or include any of its more specific indentions. Native American* will not map to Indians, North American even though Native American and Native Americans are cross references to Indians, North American.

**Take Note:****PubMed Stopword List**

PubMed also refers to a list of commonly found terms that are referred to as “stopwords.” Stopwords will not be included in your search. This list is available in PubMed’s Help.

N O T E S

Search Results Screen

Once you click on **Go** or press the Enter key, PubMed will automatically:

- Run the search
- Retrieve and display citations

The following is the Results screen returned by PubMed for the search example of :

Citations to articles about experiencing pain due to gallstones.

Live query box displaying current search.

*Display options
Show pull-down
Save button
Text button
Order button
Details button
Add to
Clipboard
button*

Citations are displayed in Summary format.

The screenshot shows the PubMed search results interface. At the top, there is a search bar with the text 'gallstones pain' and buttons for 'Go' and 'Clear'. Below the search bar are tabs for 'Limits', 'Preview/Index', 'History', and 'Clipboard'. A row of buttons includes 'Display', 'Summary' (selected), 'Save', 'Text', 'Order', 'Details', and 'Add to Clipboard'. Below these buttons, it says 'Show: 20' and 'Items 1-20 of 1322'. On the right, it says 'Page 1 of 67' and 'Select page: 1 2 3 4 5 6 7 8 9 10 >>'. The results are listed as follows:

- ☐ **1:** [Abdel-Wahab M, Abo-Elenein A, Fathy O, Gadel-Hak N, Elshal MF, Yaseen A, Sultan A, El-Ghawalby N, Ezzat F.](#)
Does cholecystectomy affect antral mucosa? Endoscopic, histopathologic and DNA flow cytometric study.
Hepatogastroenterology. 2000 May-Jun;47(33):621-5.
[MEDLINE record in process]
PMID: 10918999; UI: 20375572
- ☐ **2:** [Cavigelli A, Dietz V.](#) Related Articles
[No title available].
Schweiz Med Wochenschr. 2000 Jun 3;130(22):851-60. German.
[MEDLINE record in process]
PMID: 10893757; UI: 20352222
- ☐ **3:** [Ahmed R, Freeman JV, Ross B, Kohler B, Nicholl JP, Johnson AG.](#) Related Articles
Long term response to gallstone treatment--problems and surprises.
Eur J Surg. 2000 Jun;166(6):447-54.
[MEDLINE record in process]
PMID: 10890540; UI: 20346594

See next page for further explanation.

Results Screen

Query Box containing Current Search

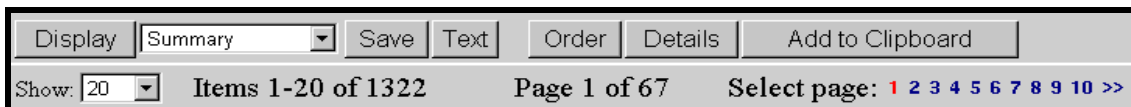


A screenshot of a search query box. The text 'gallstones pain' is entered into the input field. To the right of the input field are two buttons: 'Go' and 'Clear'.

- The query box displays **your** search.
- This box is active; you can modify the current search by adding or eliminating terms and clicking on the **Go** button.
- Click on the **Clear** button to clear out the search in the query box and start a new search.

Action Bar Selections

- These options are available both at the top and the bottom of the Results screens.
- The following workbook pages will explain each function.

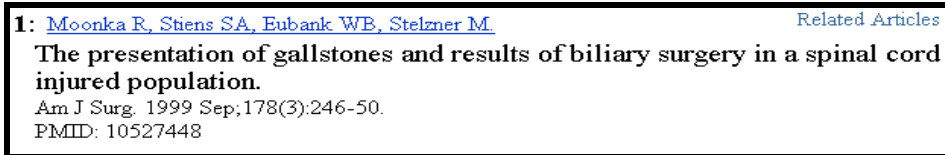


A screenshot of the action bar at the bottom of the results screen. It contains several buttons and a dropdown menu. The buttons are 'Display', 'Summary' (with a dropdown arrow), 'Save', 'Text', 'Order', 'Details', and 'Add to Clipboard'. Below these buttons, there is a 'Show:' label followed by a dropdown menu showing '20', the text 'Items 1-20 of 1322', 'Page 1 of 67', and 'Select page:' followed by a series of numbered links: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and a double greater-than sign '>>'.

Display Options

Summary Format

PubMed citations are initially displayed in the **Summary** format.



A summary citation consists of the following:

- **Author name:** All authors from the record are displayed.
- **Links:** Available links such as Related Articles, Protein, Nucleotide, etc. (LinkOut, Books not displayed in the Summary format.)
- **Title of the article:** Foreign language titles will be translated into English and placed within brackets.
- **Source:** Provides journal title abbreviation, date of publication, volume, issue, and pagination. Will also include language (for non-English articles) and Publication Type if the article is a review or retracted publication. Articles without abstracts will display the notation: “No abstract available”.
- **[Record as supplied by publisher]** or **[MEDLINE record in process]** tags may appear.
- **PubMed Unique Identifier (PMID).**

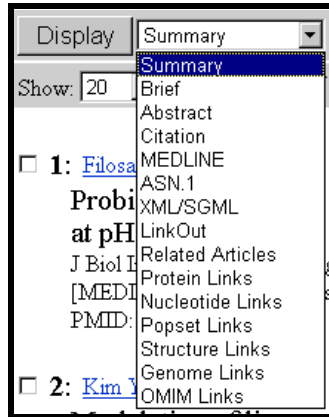
Additional Display Options

You can access other display formats from the Results screen in the following manner:

- **Individual Citations:** Clicking on the Author name hyperlink will display the citation in the default Abstract Report format.
- **All Citations:** Clicking on the **Display** button without selecting any of the citations will display all of the citations listed on the page in the selected display format. Summary is the default format.
- **Selected Citations:** Clicking on the boxes found to the left of the citation number allows you to select multiple records for retrieval. Clicking on the **Display** button will display the citations in the selected display format. Summary is the default format.

Other Display Formats

The pull-down menu next to the **Display** button allows the user to select available display formats:



Take Note:

Summary, Brief, Abstract, Citation, MEDLINE, Related Articles, and LinkOut are the most appropriate selections for bibliographic information.

Brief Format

☐ 1: [Moonka R, et al.](#) The presentation of gallstones...[PMID:10527448] [Related Articles, LinkOut](#)

A citation displayed in the brief format includes:

- Author name
- first 30 characters of the title
- PubMed Unique Identifier (PMID)

Abstract

Provides the following information:

- Journal Source (journal title abbreviation, date of publication, volume, issue and pagination)
- If necessary, [Record supplied by publisher] or [MEDLINE record in process] tags
- Title
- On non-English language articles, [Article in *language*] tag
- Authors
- Author affiliation (address) of first author at time of publication
- Abstract (if present) from published article
- Publication Types (except for Journal Article Publication Type)
- Erratum strings from Title rubrics
- Comments
- PubMed Unique Identifier

1. **1: *Am J Surg* 1999 Sep;178(3):246-50** [Related Articles, Books, LinkOut](#)
2. **The presentation of gallstones and results of biliary surgery in a spinal cord injured population.**
3. **Moonka R, Stiens SA, Eubank WB, Stelzner M**
4. Department of Surgery, Seattle Division of the Puget Sound Veterans Affairs Health Care System, University of Washington School of Medicine, USA.
5. **BACKGROUND:** Since spinal cord injured patients lack visceral sensation, their clinical manifestations of gallstones could be relatively occult. A higher proportion of these individuals may present with advanced biliary disease compared with the general population. Prophylactic cholecystectomy for asymptomatic stones may therefore be justified. **METHODS:** All spinal cord injured patients seen at the Seattle Veterans Hospital over a 5-year period were retrospectively surveyed to define a set of patients who had undergone a cholecystectomy. The operative indications and results were compared with those from a series of cholecystectomies in neurologically intact patients. **RESULTS:** The presentation of biliary disease in spinal cord injured patients was not more advanced than that of neurologically intact patients. Patients with high cord injuries presented in a similar fashion to those with low injuries. **CONCLUSIONS:** Since most spinal cord injured patients with biliary disease present with typical findings, prophylactic removal of gallstones in these patients is not warranted.
6. PMID: 10527448

Legend:

1. Journal Source
2. Title
3. Authors
4. Author Affiliation (Address)
5. Abstract
6. PubMed Unique Identifier

Citation

Provides the following information:

- Journal Source
- If necessary, [Record supplied by publisher] or [MEDLINE record in process] tags
- Title
- On non-English language articles, [Article in *language*] tag
- Authors
- Address or affiliation of first author
- Abstract (if present)
- Publication Types (except for the Journal Article pub. type)
- Erratum strings from Title rubrics
- Comments
- MeSH Terms
- Personal Name as Subject
- Chemical substances (if present)
- Grant numbers (if present)
- PubMed Unique Identifier

1: *Am J Surg* 1999 Sep;178(3):246-50

[Related Articles, Books, LinkOut](#)

The presentation of gallstones and results of biliary surgery in a spinal cord injured population.

Moonka R, Stiens SA, Eubank WB, Stelzner M

Department of Surgery, Seattle Division of the Puget Sound Veterans Affairs Health Care System, University of Washington School of Medicine, USA.

BACKGROUND: Since spinal cord injured patients lack visceral sensation, their clinical manifestations of gallstones could be relatively occult. A higher proportion of these individuals may present with advanced biliary disease compared with the general population. Prophylactic cholecystectomy for asymptomatic stones may therefore be justified. **METHODS:** All spinal cord injured patients seen at the Seattle Veterans Hospital over a 5-year period were retrospectively surveyed to define a set of patients who had undergone a cholecystectomy. The operative indications and results were compared with those from a series of cholecystectomies in neurologically intact patients. **RESULTS:** The presentation of biliary disease in spinal cord injured patients was not more advanced than that of neurologically intact patients. Patients with high cord injuries presented in a similar fashion to those with low injuries. **CONCLUSIONS:** Since most spinal cord injured patients with biliary disease present with typical findings, prophylactic removal of gallstones in these patients is not warranted.

MeSH Terms:

- ◊ Biliary Tract Diseases/epidemiology
- ◊ Biliary Tract Diseases/diagnosis
- ◊ Case-Control Studies
- ◊ Cholecystectomy*
- ◊ Cholelithiasis/surgery*
- ◊ Cholelithiasis/epidemiology
- ◊ Cholelithiasis/diagnosis
- ◊ Cholelithiasis/complications*
- ◊ Colic/epidemiology
- ◊ Colic/diagnosis
- ◊ Female
- ◊ Human
- ◊ Male
- ◊ Middle Age
- ◊ Retrospective Studies
- ◊ Spinal Cord Injuries/complications*

PMID: 10527448

MEDLINE

- Two-character tagged field format displaying all fields of the MEDLINE record.

1: [Moonka R, et al.](#) The presentation of gallstones...[PMID:10527448]
[Related Articles, LinkOut](#)

```

UI - 99454572
PMID- 10527448
DA - 19991104
DCOM- 19991104
LR - 20001218
IS - 0002-9610
VI - 178
IP - 3
DP - 1999 Sep
TI - The presentation of gallstones and results of biliary surgery in a spinal
    cord injured population.
PG - 246-50
AB - BACKGROUND: Since spinal cord injured patients lack visceral sensation,
    their clinical manifestations of gallstones could be relatively occult. A
    higher proportion of these individuals may present with advanced biliary
    disease compared with the general population. Prophylactic cholecystectomy
    for asymptomatic stones may therefore be justified. METHODS: All spinal
    cord injured patients seen at the Seattle Veterans Hospital over a 5-year
    period were retrospectively surveyed to define a set of patients who had
    undergone a cholecystectomy. The operative indications and results were
    compared with those from a series of cholecystectomies in neurologically
    intact patients. RESULTS: The presentation of biliary disease in spinal
    cord injured patients was not more advanced than that of neurologically
    intact patients. Patients with high cord injuries presented in a similar
    fashion to those with low injuries. CONCLUSIONS: Since most spinal cord
    injured patients with biliary disease present with typical findings,
    prophylactic removal of gallstones in these patients is not warranted.
AD - Department of Surgery, Seattle Division of the Puget Sound Veterans
    Affairs Health Care System, University of Washington School of Medicine,
    USA.
AU - Moonka R
AU - Stiens SA
AU - Eubank WB
AU - Stelzner M
LA - eng
PT - Journal Article
CY - UNITED STATES
TA - Am J Surg
JC - 324
JID - 0370473
SB - AIM
SB - IM
MH - Biliary Tract Diseases/diagnosis/epidemiology
MH - Case-Control Studies
MH - *Cholecystectomy
MH - Cholelithiasis/*complications/diagnosis/epidemiology/*surgery
MH - Colic/diagnosis/epidemiology
MH - Female
MH - Human
MH - Male
MH - Middle Age
MH - Retrospective Studies
MH - Spinal Cord Injuries/*complications
EDAT- 1999/10/20 09
MHDA- 1999/10/20 09
PST - ppublish
SO - Am J Surg 1999 Sep;178(3):246-50.
          
```



Take Note:

Use this format for downloading records into bibliographic management software programs.

Retrieval Summary

- The retrieval summary line displays the total number of citations that have been retrieved by the current search, and how many pages of citations there are given the selected number of citations per page (default = 20 citations/page).

Show pull-down menu

- PubMed displays search results in batches of 20 citations per page.

- Click on the Show pull-down menu to select a high/lower number and then click Display.
- PubMed redisplay the citations based on your selection

Select Page

- The Results screen will have links to the other pages containing the rest of the search results. Click on the next page of results you wish to display.
- The page number you are currently displaying is in red.
- Click on the >> symbol to see page numbers greater than the ones displayed.
- Click on the << symbol to see page numbers less than the ones displayed.

Details

Display: Summary Save Text Search Details Add to Clipboard

Show: 20 Items 1-20 of 1322 Page 1 of 67 Select page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) >>

- Clicking on the Details button displays your search strategy as it was translated by PubMed including MeSH vocabulary term mappings as well as mappings from the PubMed phrase index.
- Error messages (e.g., stopwords, truncation warnings, misspellings) are also displayed.
- The PubMed Query box in Details allows you to edit a search strategy and resubmit it.
- Details also allows you to save a search strategy.

Here's a closer look at Details :

You can modify the search strategy if you wish and then click on the **Search** button.

Click on the **URL** button to create a URL that allows you to save your search strategy.

Click on the **Result** number hyperlink to return to the current search results.

PubMed
Translations

Search strategy: `((("cholelithiasis"[MeSH Terms] OR gallstones[Text Word]) AND ("pain"[MeSH Terms] OR pain[Text Word]))`

Search URL

Result:
[1355](#)

Translations:

| | |
|------------------------|---------------------------------------------------------|
| gallstones[All Fields] | ("cholelithiasis"[MeSH Terms] OR gallstones[Text Word]) |
| pain[All Fields] | ("pain"[MeSH Terms] OR pain[Text Word]) |

Database:
PubMed

User Query:
gallstones pain

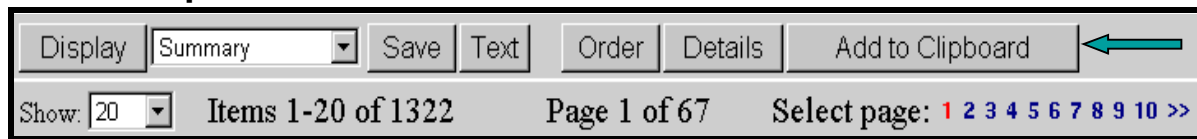
Saving a search strategy from Details:

- Click on the **URL** button. PubMed will return to the search results screen. The translated search strategy will be displayed in the query box and this search strategy will also be embedded as part of the URL.
- Next, use your Web browser's bookmark function to save the URL as a bookmark. After saving the bookmark, you may want to use your Web browser's edit functions to rename the bookmark.
- See Caution in PubMed-Features Bar (Section G) about the History feature and saving strategies.

Current Awareness Searching

If you wish to run a search periodically to retrieve recent information since you last ran the search, you can use the PubMed **Cubby**. See Section J of this workbook for detailed information on **Cubby Stored Searches**.

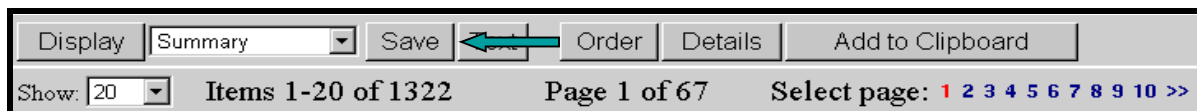
Add to Clipboard



The screenshot shows the top navigation bar of the PubMed search results page. It includes a 'Display' dropdown menu set to 'Summary', and buttons for 'Save', 'Text', 'Order', 'Details', and 'Add to Clipboard'. The 'Add to Clipboard' button is highlighted with a green arrow. Below the buttons, the status bar shows 'Show: 20', 'Items 1-20 of 1322', 'Page 1 of 67', and 'Select page: 1 2 3 4 5 6 7 8 9 10 >>'.

- The clipboard allows you save or view selected citations from one search or several searches that you may want to print, save, or order.
- The maximum number of items that can be placed in the Clipboard is **500**.
- The Clipboard will be **lost after one hour of inactivity** on PubMed or any of the other Entrez databases.
- To place an item in the Clipboard, click on the check-box to the left of the citation and then click on the **Add to Clipboard** button.
- Once you have added a citation to the Clipboard, the record number color will change.

Save



The screenshot shows the top navigation bar of the PubMed search results page. It includes a 'Display' dropdown menu set to 'Summary', and buttons for 'Save', 'Text', 'Order', 'Details', and 'Add to Clipboard'. The 'Save' button is highlighted with a green arrow. Below the buttons, the status bar shows 'Show: 20', 'Items 1-20 of 1322', 'Page 1 of 67', and 'Select page: 1 2 3 4 5 6 7 8 9 10 >>'.

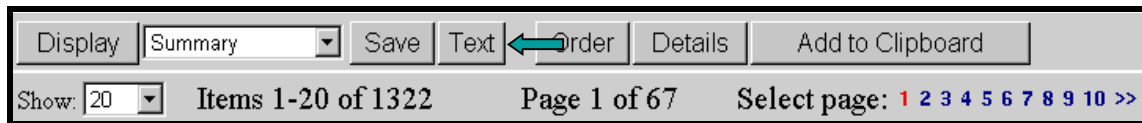
- To **save your entire set of search results**, use the Display pull-down menu to select the desired format, click **Save**. This option saves the entire set of search results in the display format selected.
- To mark **selected citations to save**, click on the check-box to the left of each citation as you go through each page of your retrieval. Once you have marked all of your selected citations and chosen a display format, click the **Save** button.



Take Note:

The maximum number of items that can be saved is **10,000**. If you try to save a file with more than 10,000 citations, PubMed will display an error message that instructs you to refine your search.

Text

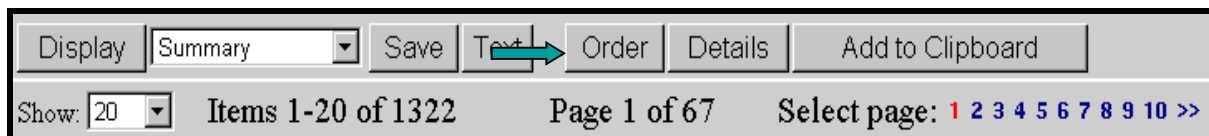


- Use Text to redisplay citations using just the text of the records and omitting the Web or HTML components. When finished with the text display, use your Web browser's Back button to return to your results in HTML.
- You may want to print via your Web browser using this feature so you do not print PubMed's sidebar and buttons unnecessarily.
- The text version will display either selected citations, or if no citations are selected, all the citations on the page.
- Before using the Text button, consider using the Show feature to increase the number of items per page.

Printing

- Use the Print function of your Web browser which will print all the information and citations displayed on your Web page.
- Consider using the Text button described above.
- Think about using the Show pull-down menu to display all of your citations on one Web page. You can only print the citations from the displayed page.

Order



- Click **Order** to use an automated document ordering program called **Loansome Doc**.
- You can also **Order** directly from the Clipboard. See the **Ordering Documents** section of this workbook, pages G-22 through G-27, for detailed information on **Loansome Doc**.

Practice Exercises

1. Find references about shingles and facial paralysis. Display the records in the format that shows the abstract and the MeSH headings. How does PubMed map the term, shingles?
2. Find references about hypertension and a nosebleed. How does PubMed map the term, nosebleed? Display all of the retrieved records on one Web page.
3. Find references about injuries from backpacks or backpacking. Save this search strategy so the search can be run again at a later date.
4. Find references about genetically modified food. Display the retrieved records in the format where you display the abstract but not the MeSH headings.

Suggested Answers:

1. Find references about shingles and facial paralysis. Display the records in the format that shows the abstract and the MeSH headings. How does PubMed map the term, shingles?

Details:

The screenshot shows the PubMed search interface. At the top, there is a search bar with the text "shingles facial paralysis" and buttons for "Go" and "Clear". Below the search bar are links for "Limits", "Preview/Index", "History", and "Clipboard".

PubMed Query:

```
((("herpes zoster"[MeSH Terms] OR shingles[Text Word]) AND ("facial paralysis"[MeSH Terms] OR facial paralysis[Text Word]))
```

Below the query box are buttons for "Search" and "URL".

Result:

[287](#)

Translations:

| | |
|------------------------------|-----------------------------------------------------------------|
| shingles[All Fields] | ("herpes zoster"[MeSH Terms] OR shingles[Text Word]) |
| facial paralysis[All Fields] | ("facial paralysis"[MeSH Terms] OR facial paralysis[Text Word]) |

Database:

PubMed

User Query:

shingles facial paralysis

Use the **Citation** display format to display both the abstract and MeSH headings. The term, shingles, maps to the MeSH heading of **Herpes Zoster**.

2. Find references about hypertension and a nosebleed. How does PubMed map the term, nosebleed? Display all of the retrieved records on one Web page.

Details:

for hypertension nosebleed

Go Clear

Limits Preview/Index History Clipboard

PubMed Query:

((("hypertension"[MeSH Terms] OR hypertension[Text Word]) AND ("epistaxis"[MeSH Terms] OR nosebleed[Text Word]))

Search URL

Result:

[85](#)

Translations:

| | |
|--------------------------|---------------------------------------------------------|
| hypertension[All Fields] | ("hypertension"[MeSH Terms] OR hypertension[Text Word]) |
| nosebleed[All Fields] | ("epistaxis"[MeSH Terms] OR nosebleed[Text Word]) |

Database:

PubMed

User Query:

hypertension nosebleed

The term, nosebleed, maps to the MeSH heading, **epistaxis**. From the **Show pull-down** menu, choose a number higher than your final retrieval set in order to display all the records on one Web page.

- Find references about injuries from backpacks or backpacking. Save this search strategy so the search can be run again at a later date.

Details:

If you truncate
backpack* you
pick up:

backpack
backpacker
backpackers
backpacking
backpacks

The screenshot shows the PubMed search interface. At the top, there is a search bar with the text "injuries backpack*" and buttons for "Go" and "Clear". Below the search bar are tabs for "Limits", "Preview/Index", "History", and "Clipboard". The main section is titled "PubMed Query:" and contains a large text area with the following query:
(((("injuries"[Subheading] OR "wounds and injuries"[MeSH Terms]) OR injuries[Text Word]) AND (((backpack[All Fields] OR backpacker[All Fields]) OR backpackers[All Fields]) OR backpacking[All Fields]) OR backpacks[All Fields]))
Below the query area are buttons for "Search" and "URL". The "Result:" section shows a single result with a link icon. The "Translations:" section shows the query broken down into its components: injuries[All Fields], ("injuries"[Subheading] OR "wounds and injuries"[MeSH Terms]), and injuries[Text Word]. The "Database:" section shows "PubMed". The "User Query:" section shows "injuries backpack*".

Use the **URL button** from Details to have PubMed embed the search strategy into a URL. Use the Web browser's bookmark function to save this URL.

- Find references about genetically modified food. Display the retrieved records in the format where you display the abstract but not the MeSH headings.

Details:

The screenshot shows the PubMed search interface. At the top, there is a search bar with the text "genetically modified food" and buttons for "Go" and "Clear". Below the search bar are tabs for "Limits", "Preview/Index", "History", and "Clipboard". The "PubMed Query:" section displays the following query: `((genetically[All Fields] AND modified[All Fields]) AND ("food"[MeSH Terms] OR food[Text Word]))`. Below the query is a "Search" button and a "URL" button. The "Result:" section shows the number "177". The "Translations:" section shows the query translated into MeSH terms: `food[All Fields] ("food"[MeSH Terms] OR food[Text Word])`. The "Database:" section shows "PubMed". The "User Query:" section shows "genetically modified food".

Use the **Abstract** display to display the records with abstracts (if present) but not MeSH headings.

NOTES

Features Bar

Limits Preview/Index History Clipboard

The Features Bar allow you to select several additional functions.

Limits

Limits Preview/Index History Clipboard

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]
- Search [limits](#) may exclude PreMEDLINE and publisher supplied citations

Limited to:

All Fields ☐ only items with abstracts

Publication Types Languages Subsets

Ages Human or Animal Gender

Entrez Date

Publication Date From To

Use the format YYYY/MM/DD; month and day are optional.



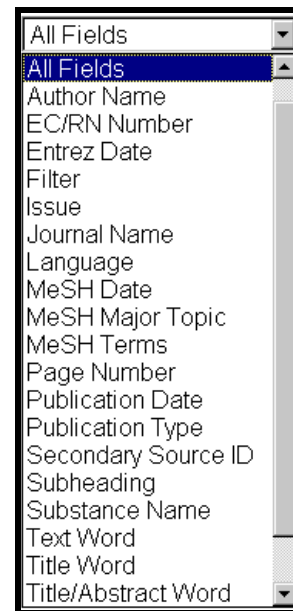
Take Note:

Click on **Limits** from the Features Bar to bring up the Limits page.

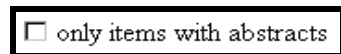
- Allows you to limit your search terms to a specific search field.
- Allows you to limit your search to a specific age group, gender, or human or animal studies.
- Also allows you to restrict your articles published in specific language and to specific types of articles such as review articles.
- You may choose to limit to only citations containing abstracts.
- You can also limit by either Entrez Date or Publication Date.
- You may limit to a specific subset of citations within PubMed, such as citations from *Abridged Index Medicus* or AIDS-related citations.

Field Selection

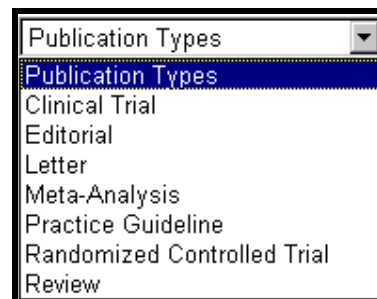
- You may limit your search terms to a specific search field.
- All Fields is the default.
- To select a specific field, click the All Fields pull-down menu and select a search field.

**Only items with abstracts**

- Click in this box to limit your retrieval to only citations having an abstract present on the record.

**Publication Types**

- You may limit your retrieval based on the type of material the article represents.
- The Publication Types pull-down menu contains a list of frequently searched publication types.

**Languages**

- Journals from approximately forty languages are indexed.
- The Languages pull-down menu contains a list of frequently searched languages.

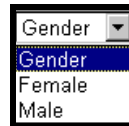


Ages

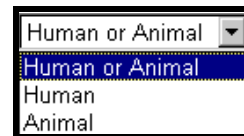
- To select a specific age group for human studies, click on the Ages pull-down menu.

**Gender**

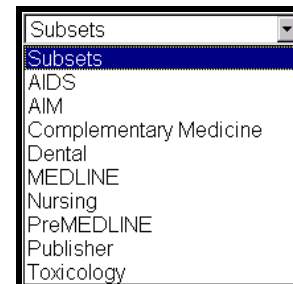
- To select a specific gender, click on the Gender pull-down menu.

**Human or Animal**

- To select a specific study group, click on the Human or Animal pull-down menu.

**Subsets**

- Allows you to limit your retrieval to one of the four types of groupings of records:



1. Level of processing:
 - ▶ Publisher: [Record as supplied by publisher] citations
 - ▶ PreMEDLINE: [MEDLINE record in process] citations
 - ▶ MEDLINE: Fully MeSH-indexed citations
2. Subject Filter:
 - ▶ AIDS: Based on a strategy developed for creating NLM's AIDSLINE database
 - ▶ Complimentary Medicine: The result of a joint project between NLM and the National Center for Complementary and Alternative Medicine. It allows you to search more easily for citations to journal articles related to complementary and alternative medicine.
 - ▶ Toxicology: Based on a strategy developed for creating NLM's TOXLINE database
3. Journal groupings
 - ▶ AIM: *Abridged Index Medicus* journals; 120 English-language journals
 - ▶ Dental: Subset of dental journals
 - ▶ Nursing: Subset of nursing journals

Dates

- PubMed contains citations published back to 1966.
- New citations are added Tuesday-Saturday.
- You may restrict to two date fields from the Limits screen:
 - ▶ Entrez Date: the date the citation was initially added to PubMed
 - ▶ Publication Date: the date the article was published
- When PubMed displays your search results, the citations are displayed in Entrez Date order - last in, first out.

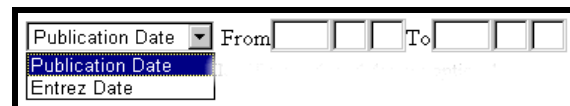
Limiting by Dates

- Use the Entrez Date pull-down menu to limit your search back in time from 30 days to 10 years.



- The Publication Date pull-down menu toggles between Publication Date and Entrez Date

- Use the From and To boxes to specify a range of dates.



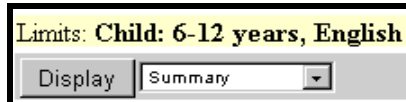
- Enter the dates in the format of YYYY/MM/DD (month and day are optional)

Examples:

A screenshot of the 'Publication Date' pull-down menu with 'From' and 'To' date boxes. The 'From' box contains '1999 02' and the 'To' box contains '1999 05'. Below the boxes is the text: 'Use the format YYYY/MM/DD; month and day are optional.'A screenshot of the 'Entrez Date' pull-down menu with 'From' and 'To' date boxes. The 'From' box contains '1999 08 01' and the 'To' box contains '1999 08 31'. Below the boxes is the text: 'Use the format YYYY/MM/DD; month and day are optional.'

Limits Indicator

- Once you have selected Limits, a check box appears next to Limits.
- If you run a search, the limits in effect will appear in the yellow bar above the Display button:



To **turn off all the limits** before you run your next search, click on the check box to remove the check and turn off the limits.

Take Note:

Preview/Index

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

This page is home to two functions: Preview and Index

Use Preview/Index to:

- ✓ Preview the number of search results before displaying the citations.
- ✓ Refine search strategies by adding one or more terms one at a time.
- ✓ Add terms to a strategy from specific search fields.
- ✓ View and select terms from the Index to develop search strategies.
- ✓ View your search strategy as you continue to refine your search.

Preview

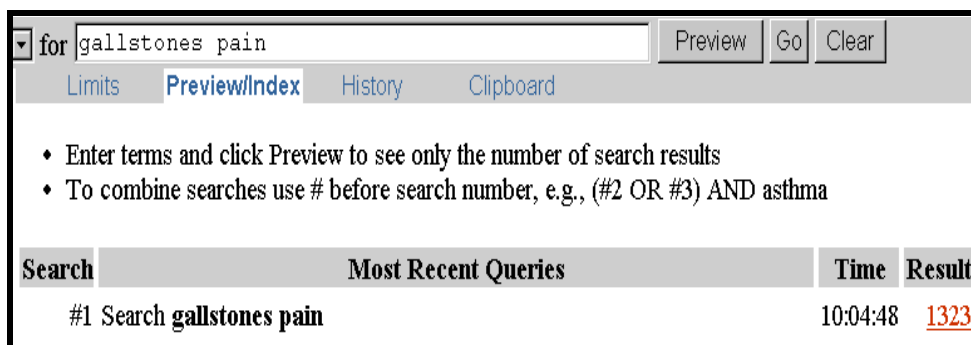
Previewing the number of search results before displaying the citations

- Enter terms in the query box and click **Preview**.



Search PubMed for gallstones pain Preview Go Clear

- PubMed returns the number of citations but not the actual results.



for gallstones pain Preview Go Clear

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|-----------|---------------------|----------|-------------|
| #1 Search | gallstones pain | 10:04:48 | <u>1323</u> |

Result shows the number of citations.

Refining search strategies by adding one or more terms one at a time

- Add another term to the query box and click **Preview**.
- Continue adding terms and clicking **Preview** until your strategy is complete.
- View your search strategy and number of results as you continue to refine your search.

Preview shows search strategy and number of results as each term is added.

| Search | Most Recent Queries | Time | Result |
|--------|----------------------------------------|----------|-------------|
| #3 | Search review children gallstones pain | 10:20:52 | <u>32</u> |
| #2 | Search children gallstones pain | 10:20:42 | <u>257</u> |
| #1 | Search gallstones pain | 10:04:48 | <u>1323</u> |



Take Note:

Preview displays the last three queries from History. Use History to review up to the last 100 queries. The Clear History button in History also clears the history information in Preview/Index.



Take Note:

History will be lost after one hour of inactivity on PubMed.

Adding terms to a strategy from specific search fields

- Scroll down Preview/Index to find the “Add Term(s) to Query or View Index” section of the screen.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

All Fields Preview Index

Click to add a term to the query box.

- Use the pull-down menu to specify a search field.
- Enter a term in the text box.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

MeSH Terms strikes Preview Index

Click AND OR NOT to add a term to the query box.

- Click **Preview** to add terms to the query box and see the number of search results.

*Query box
shows search
term and field.*

▼

for strikes[MeSH Terms]

Preview Go Clear

Limits
Preview/Index
History
Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|-----------|---------------------|----------|--------|
| #1 Search | strikes[MeSH Terms] | 10:29:27 | 753 |

*Result shows
number of
citations.*

Now, let's refine this search by adding the MeSH term, Nurses.

- Use the pull-down menu to specify a search field.
- Add another term to the text box.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

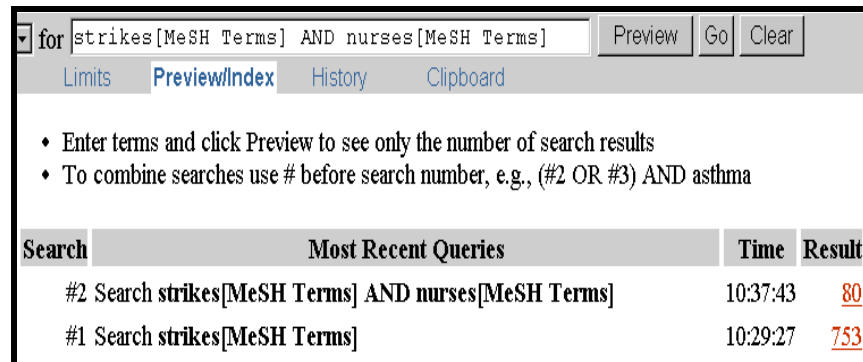
MeSH Terms nurses Preview Index

Click AND OR NOT to add a term to the query box.

- Click **Preview**.
- Continue adding terms and clicking **Preview** until your strategy is complete.
- View your search strategy as you continue to refine your search.

Query box shows search terms and fields.

Result shows number of citations.



for strikes[MeSH Terms] AND nurses[MeSH Terms] Preview Go Clear

Limits Preview/Index History Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------|----------|--------|
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | 80 |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | 753 |

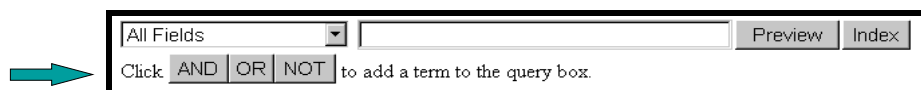


Take Note:

Preview automatically ANDs search terms together and previews the search results.

Using Boolean operator buttons

Use the **Boolean operators** to combine search terms as needed. With the Boolean operators, your search terms are added to the PubMed query box, but you must click Preview to see the number of results.



All Fields [] Preview Index

Click AND OR NOT to add a term to the query box.

Search example:

Let's say we want to learn more about the health effects of either carbohydrates or soybeans on osteoporosis.

- Use the pull-down menu to specify a search field.
- Add a term to the text box.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

MeSH Terms

carbohydrates

Preview

Index

Click AND OR NOT to add a term to the query box.

- Click the **AND** button.

Query box shows the search term and field.

But the search has not been previewed and the number of results are not shown.

for

carbohydrates[MeSH Terms]

Preview

Go

Clear

Limits
Preview/Index
History
Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------|----------|------------------------------------------------------------------|
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | 80 |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | 753 |

We can preview this result or continue building our strategy. Since we also want to know about soybeans in addition to carbohydrates, let's continue building.

- Use the pull-down menu to specify a search field.
- Add another term to the text box.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

MeSH Terms
soybeans
Preview
Index

Click
AND
OR
NOT
to add a term to the query box.

- Click the **OR** button.

Soybeans [MeSH Terms] is added to the Query box with the OR operator.

But the search has not been Previewed and the number of results are not shown.

for carbohydrates[MeSH Terms] OR soybeans[MeSH Te
Preview
Go
Clear

Limits
Preview/Index
History
Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------|----------|------------|
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | <u>80</u> |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | <u>753</u> |

Let's add our last term to the strategy.

- Use the pull-down menu to specify a search field.
- Add the last term to the text box.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.

MeSH Terms
osteoporosis
Preview
Index

Click
AND
OR
NOT
to add a term to the query box.

- Click the **AND** button.

Osteoporosis [MeSH Terms] is added to the Query box with the AND operator.

But the search has not been previewed and the number of results are not shown.

for

beans[MeSH Terms] AND osteoporosis[MeSH Terms]

Preview

Go

Clear

Limits

Preview/Index

History

Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------|----------|------------|
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | <u>80</u> |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | <u>753</u> |

- Click **Preview** to see the number of results for the strategy.

Query box shows search terms, search fields and Boolean operators.

Result shows number of citations.

for

carbohydrates[MeSH Terms] OR soybeans[MeSH Terms] AND osteoporosis[MeSH Terms]

Preview

Go

Clear

Limits

Preview/Index

History

Clipboard

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------------------------------------------|----------|------------|
| #3 | Search carbohydrates[MeSH Terms] OR soybeans[MeSH Terms] AND osteoporosis[MeSH Terms] | 11:21:05 | <u>348</u> |
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | <u>80</u> |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | <u>753</u> |

Index

Viewing and selecting terms from the Index to develop search strategies

- Use the **Index** button to view and select terms from the Index of the specific field to add them to your strategy.
- The Index allows you to view a listing of terms within a search field.
- You may also select terms to build a search strategy using Boolean operators.

Selecting a field and entering a term to look up in the Index

Let's select **MeSH Terms** from the pull-down menu, type in the term, **strikes** and click on the **Index** button.

PubMed displays a portion of the alphabetical list of available terms for the selected search field. Scroll up and down this window using the scroll bar.

The number of citations that contain the term appears in parentheses to the right of the term.

*To scroll up or down the entire Index for the field, click the **Up** or **Down** buttons.*

MeSH Terms strikes Preview Index

Click AND OR NOT to add terms selected from Index to the query box.

strikes, employee(740)
strikes, employee/economics(14)
strikes, employee/history(10)
strikes, employee/legislation and jurisprudence(54)
strikes, employee/manpower(1)
strikes, employee/organization and administration(88)
strikes, employee/statistics and numerical data(10)
strikes, employee/trends(10)
strikes, employee/utilization(1)
stroke volume(13873)

Up Down

**Take Note:**

Strikes is an entry term for the preferred MeSH heading, ***Strikes, Employee***.

Selecting a term from the Index

- Click on the term(s) to highlight it.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.
- Multiple terms selected from Index will be ORed; click AND to add to search.

MeSH Terms

Click to add terms selected from Index to the query box.

strikes, employee/economics(14)
 strikes, employee/history(10)
 strikes, employee/legislation and jurisprudence(54)
 strikes, employee/manpower(1)
 strikes, employee/organization and administration(88)
 strikes, employee/statistics and numerical data(10)
 strikes, employee/trends(10)
 strikes, employee/utilization(1)
 stroke volume(13891)

- Click on **Preview**.
- Continuing viewing, selecting, and previewing search terms until your strategy is complete.

Query box shows the search term and search field.

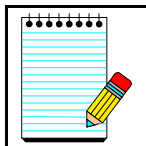
Result shows the number of citation.

for [MeSH Terms]

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

- Enter terms and click Preview to see only the number of search results
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma

| Search | Most Recent Queries | Time | Result |
|--------|------------------------------------------------------------------------------------------|----------|---------------------|
| #4 | Search "strikes, employee" [MeSH Terms] | 11:35:11 | 753 |
| #3 | Search carbohydrates [MeSH Terms] OR soybeans [MeSH Terms] AND osteoporosis [MeSH Terms] | 11:21:05 | 348 |
| #2 | Search strikes [MeSH Terms] AND nurses [MeSH Terms] | 10:37:43 | 80 |



Take Note:

Preview automatically ANDs search terms together and previews the search. Use the **Boolean operators** to combine search terms as needed. If you use the Boolean operators, your search terms are added to the PubMed query box, and you must click Preview to see the number of results.



To OR together multiple terms from an Index display and then add (or AND) them to your search, click on each term while holding down the Ctrl-key(PC) or the Command-key(Mac). When all the terms you want are highlighted, click the connector AND to add the terms (ORed together) to the query.

Search Tip:

Search example:

- Click to highlight, **strikes, employee** used with the subheading of **legislation and jurisprudence** as well as **strikes, employee** used with the subheading **statistics and numerical data** in the display.
- Click on the **AND** button to select and add the terms to your query.
- Multiple selections are automatically ORed together.

Holding down the Ctrl or Command key; click to highlight the terms.

Click on the AND button.

Multiple selections are automatically ORed together.

The screenshot shows the PubMed MeSH Terms interface. At the top, there is a search bar with "MeSH Terms" and "strikes". To the right are "Preview" and "Index" buttons. Below the search bar is a list of terms with their associated counts. Two terms are highlighted in blue: "strikes, employee/legislation and jurisprudence(54)" and "strikes, employee/statistics and numerical data(10)". To the left of the list are buttons for "AND", "OR", and "NOT". To the right of the list are "Up" and "Down" buttons. Below the list is a text box that says "Click AND OR NOT to add terms selected from Index to the query box."

| MeSH Term | Count |
|---------------------------------------------------|-------|
| strikes, employee | 740 |
| strikes, employee/economics | 14 |
| strikes, employee/history | 10 |
| strikes, employee/legislation and jurisprudence | 54 |
| strikes, employee/manpower | 1 |
| strikes, employee/organization and administration | 88 |
| strikes, employee/statistics and numerical data | 10 |
| strikes, employee/trends | 10 |
| strikes, employee/utilization | 1 |
| stroke volume | 13873 |

The following search has been added to PubMed's query box:

("strikes, employee/legislation and jurisprudence"[MeSH Terms] OR "strikes, employee/statistics and numerical data"[MeSH Terms])

Let's further refine this search using the **Index**. We want to narrow the search to those citations discussing this situation and **nurses**. Enter **nurses** in the view entry box and click **Index**. Select nurses in the Index and then click on the **AND** button to add it to your query:

Click on the **Preview** button to get the number of results.

Query box shows search terms, search fields and Boolean operators.

Result shows the number of citations.

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|
| #5 | Search ("strikes, employee/legislation and jurisprudence" [MeSH Terms] OR "strikes, employee/statistics and numerical data" [MeSH Terms]) AND "nurses" [MeSH Terms] | 12:00:47 | 4 |
| #4 | Search "strikes, employee" [MeSH Terms] | 11:35:11 | 753 |
| #3 | Search carbohydrates [MeSH Terms] OR soybeans [MeSH Terms] AND osteoporosis [MeSH Terms] | 11:21:05 | 348 |



Take Note:

Author Field Index: PubMed automatically truncates on the author's name to account for varying initials, e.g., smith j will retrieve smith ja, smith jb, smith j jr, etc. In the Author Field Index, when an author's name is displayed with the @ symbol after the first initial, this indicates occurrences of the author name without a middle initial. Selecting smith j@ from the index will only retrieve smith j.

History

Limits Preview/Index **History** Clipboard

- History holds all your search strategies and results.
- History is only available after you run your first search.
- The History screen displays:
 - ▶ your search query
 - ▶ the time of the search
 - ▶ the number of citations in your search results

| Limits Preview/Index History Clipboard | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------|
| <ul style="list-style-type: none"> • Search History will be lost after one hour of inactivity • To combine searches use # before search number, e.g., #2 AND #6 | | | |
| Search | Most Recent Queries | Time | Result |
| #6 | Search gallstones pain | 12:22:54 | 1323 |
| #5 | Search ("strikes, employee/legislation and jurisprudence"[MeSH Terms] OR "strikes, employee/statistics and numerical data"[MeSH Terms]) AND "nurses"[MeSH Terms] | 12:00:47 | 4 |
| #4 | Search "strikes, employee"[MeSH Terms] | 11:35:11 | 753 |
| #3 | Search carbohydrates[MeSH Terms] OR soybeans[MeSH Terms] AND osteoporosis[MeSH Terms] | 11:21:05 | 348 |
| #2 | Search strikes[MeSH Terms] AND nurses[MeSH Terms] | 10:37:43 | 80 |
| #1 | Search strikes[MeSH Terms] | 10:29:27 | 753 |

Using History

- You can use the search statement numbers shown in history in search strategies.

Example:

#6 AND laparoscopy Preview Go Clear



Search Tip:

Boolean operators must be typed in all caps as shown in the example above.

Other examples:

#8 AND #10
#7 OR #14

- You can also use History to **Preview** search results, just like with the Preview/Index feature.



History Tips:

- ✓ Maximum number of queries that can be held in History is **100**. Once the maximum number is reached, PubMed will remove the oldest search from the History to add the most current search query.
- ✓ Your search History will automatically be **lost after 1 hour of inactivity**.
- ✓ PubMed will move a search statement number to the top of the History if the new search is the same as a previous search.
- ✓ A separate Search History will be kept for each of the other Entrez databases although the search statement numbers will be assigned sequentially for all databases.
- ✓ Caution: Search statement numbers from History should **not** be used in a strategy that you intend to save using the URL button in Details or in a search strategy you plan to store in Cubby.

Why Not? Although the strategy will be saved, your History will automatically be lost or cleared after 1 hour of inactivity. Any search statement numbers included in the saved strategy will be gone, or possibly replaced by other searches.



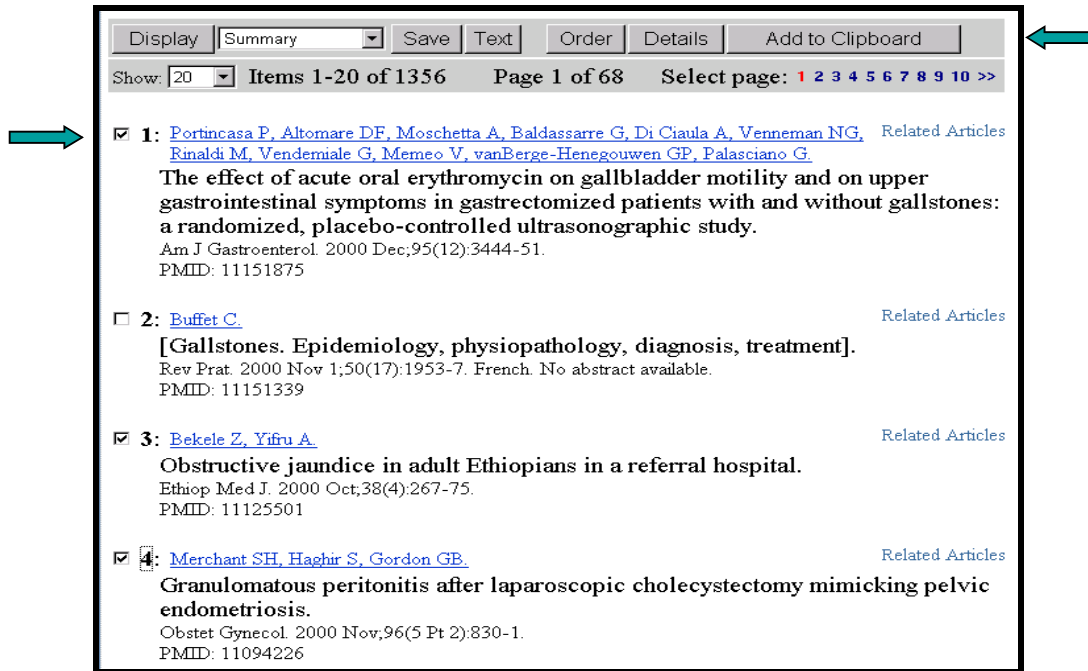
Search Tip:

Click on the **Clear History** button available at the bottom of your search History screen to remove *all* searches from the History.

Clipboard

Limits Preview/Index History **Clipboard**

- Clipboard allows you to save or view selected citations from one search or several searches.



Display Summary Save Text Order Details Add to Clipboard

Show: 20 Items 1-20 of 1356 Page 1 of 68 Select page: 1 2 3 4 5 6 7 8 9 10 >>

☒ 1: [Portincasa P, Altomare DF, Moschetta A, Baldassarre G, Di Ciaula A, Venneman NG, Rinaldi M, Vendemiale G, Memeo V, vanBerge-Henegouwen GP, Palasciano G.](#) Related Articles
The effect of acute oral erythromycin on gallbladder motility and on upper gastrointestinal symptoms in gastrectomized patients with and without gallstones: a randomized, placebo-controlled ultrasonographic study.
 Am J Gastroenterol. 2000 Dec;95(12):3444-51.
 PMID: 11151875

☐ 2: [Buffet C.](#) Related Articles
[Gallstones. Epidemiology, physiopathology, diagnosis, treatment].
 Rev Prat. 2000 Nov 1;50(17):1953-7. French. No abstract available.
 PMID: 11151339

☒ 3: [Bekele Z, Yifru A.](#) Related Articles
Obstructive jaundice in adult Ethiopians in a referral hospital.
 Ethiop Med J. 2000 Oct;38(4):267-75.
 PMID: 11125501

☒ 4: [Merchant SH, Haghir S, Gordon GB.](#) Related Articles
Granulomatous peritonitis after laparoscopic cholecystectomy mimicking pelvic endometriosis.
 Obstet Gynecol. 2000 Nov;96(5 Pt 2):830-1.
 PMID: 11094226

- You can then sort, print, save, or order the citations in the Clipboard.
- To place items in the clipboard, click on the check-box to the left of the citation.
- Then click the **Add to Clipboard** button.
- Once the citation has been added to the Clipboard, the record number color will change.

Clipboard Tips:

- ✓ If you click Add to Clipboard without selecting citations using the check-box, PubMed will add up to 500 citations to the Clipboard.
- ✓ The maximum number of items that can be placed in the Clipboard is **500**.
- ✓ The Clipboard will be **lost after one hour of inactivity**.

Using Clipboard

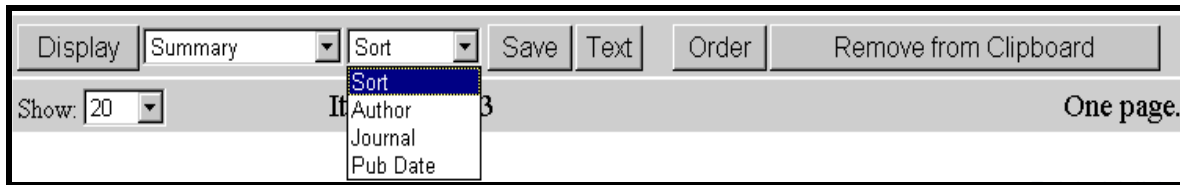
- To view the contents of your Clipboard, click on **Clipboard** from the Features bar.

The screenshot displays the PubMed 'Clipboard' tab. At the top, there are navigation links: 'Limits', 'Preview/Index', 'History', and 'Clipboard' (which is highlighted). Below these links, two bullet points state: 'The Clipboard will hold a maximum of 500 items.' and 'Clipboard items will be lost after one hour of inactivity.' A toolbar contains buttons for 'Display' (with a dropdown menu set to 'Summary'), 'Sort' (with a dropdown arrow), 'Save', 'Text', 'Order', and 'Remove from Clipboard'. Below the toolbar, it shows 'Show: 20' and 'Items 1-3 of 3' on the left, and 'One page.' on the right. The main area lists three items, each with a checkbox, a number, a link to the article, the title, and the PMID. Item 1 is selected. Each item has a 'Related Articles' link to its right.

| Item | Authors | Title | Journal | PMID | Related Articles |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------|----------------------------------|
| <input checked="" type="checkbox"/> 1 | Portincasa P, Altomare DF, Moschetta A, Baldassarre G, Di Ciaula A, Venneman NG, Rinaldi M, Vendemiale G, Memeo V, vanBerge-Henegouwen GP, Palasciano G | The effect of acute oral erythromycin on gallbladder motility and on upper gastrointestinal symptoms in gastrectomized patients with and without gallstones: a randomized, placebo-controlled ultrasonographic study. | Am J Gastroenterol. 2000 Dec;95(12):3444-51. | PMID: 11151875 | Related Articles |
| <input type="checkbox"/> 2 | Bekele Z, Yifru A | Obstructive jaundice in adult Ethiopians in a referral hospital. | Ethiop Med J. 2000 Oct;38(4):267-75. | PMID: 11125501 | Related Articles |
| <input type="checkbox"/> 3 | Merchant SH, Haghiri S, Gordon GB | Granulomatous peritonitis after laparoscopic cholecystectomy mimicking pelvic endometriosis. | Obstet Gynecol. 2000 Nov;96(5 Pt 2):830-1. | PMID: 11094226 | Related Articles |

Sorting citations from the Clipboard:

- To sort citations by author, journal or publication date, click on the Sort pull-down menu on the Clipboard to select a sort field, then click Display.



- Author and Journal sorts alphabetically A to Z, the secondary sort is Publication Date.
- Publication Date (i.e., Pub Date) sorts the latest publication date first, the secondary sort is Journal title.

Deleting citations from the Clipboard:

- To delete selected citations, click on the check-box to the left of the citation and then click on the **Remove from Clipboard** button.
- To empty the Clipboard, simply click on the **Remove from Clipboard** button.

Saving citations in the Clipboard

- Select a display format.
- Select citations you wish to save from the Clipboard (if you want to save all citations, no selection is necessary).
- Click on **Save** button.

**Search Tip:**

Citations in the Clipboard are represented by the search number #0 which may be used in Boolean search statements. For example, limit the items in the Clipboard to English language citations using the following search:

#0 AND english [la]

This does not affect or replace the Clipboard contents.

Ordering Documents



You can order directly from the results screen, or you can collect citations on the Clipboard and order from there.

Take Note:

The **Order Documents** feature allows you to use an automated document ordering program called **Loansome Doc**.

What is Loansome Doc?

The Loansome Doc feature allows you to electronically order the full-text of a citation from a Loansome Doc participating library in your area. Prior to using this feature, you need to establish an agreement with a Loansome Doc participating library. Your Loansome Doc library will provide you with their **Library ID** which is needed when setting up the service within PubMed or IGM.

What does it cost?

The library providing you this service will explain their ordering fees. This service is generally *not* free.

What library can provide me this service?

Call your Regional Medical Library at **1-800-338-7657** Monday-Friday, 8:30 A.M. - 5:00 P.M. in all time zones to find out which medical libraries in your area can provide you Loansome Doc ordering service.

- To order specific citations, click on the check-box to the left of each citation in the Clipboard (or on the results screen).
- Click the **Order** button.

After clicking on the **Order** button from the Clipboard (or on the results screen), you are brought to this next screen allowing you to:

- log into the Loansome Doc Ordering Server
- obtain a status report of your orders
- modify information on your Loansome Doc ID record
- learn about registering for a Loansome Doc code/password

The screenshot shows a web interface for 'Loansome Doc Ordering'. The header bar is blue with 'NLM' on the left, 'Loansome Doc Ordering' in the center, and 'PubMed' on the right. The main content area has a light blue background and is split into two panels. The left panel, titled 'If you are a Registered user...', contains a 'Please enter:' section with input fields for 'User ID' and 'Password', a dropdown menu for 'Order Documents', and a 'GO' button. Below this is a link 'Forgot your User ID or Password?'. The right panel, titled 'If you are new...', contains a section 'How to register if you are in:' with a dropdown menu showing 'USA' and a 'GO' button. Below this is a link 'Frequently asked questions'.

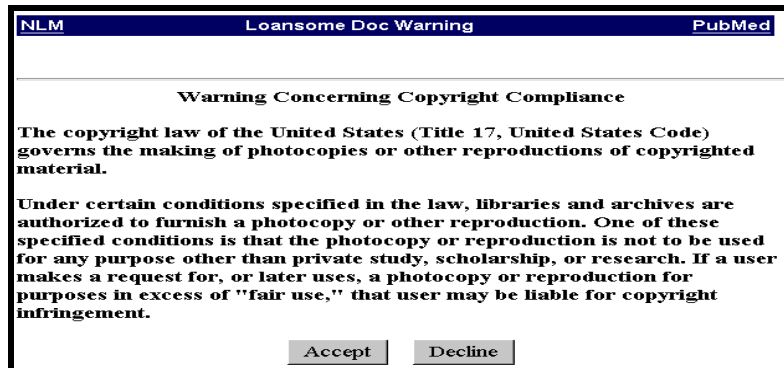
- If you are new, and click on the **GO** button to learn about registering, you reach the Loansome Doc Registration screen giving you important information about the Loansome Doc service as shown on the next page.

| NLM | Loansome Doc Registration | PubMed |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------|
| USA | | |
| <p>As a first time user, you need to establish an agreement with a health science library (or up to three additional libraries) for service. That library will become your Ordering Library, and will provide you with a Library Identifier (LIBID) to enter. All of the orders you place using Loansome Doc will be sent to this library which will then provide you with full text copies of the articles you order.</p> | | |
| <p>If you have a health science library you use on a regular basis, check with that library first to determine if they provide Loansome Doc service. If you need assistance in finding a library that can provide the service for you, contact the Regional Medical Library in your area during normal business hours at: 1-800-338-RMLS (7657) or go to: http://www.nlm.nih.gov/members/.</p> | | |
| Enter the Library Identifier (LIBID) of your Ordering Library : <input type="text"/> (required) | | |
| Enter additional LIBIDs : <input type="text"/> <input type="text"/> <input type="text"/> (optional) | | |
| Note: | | |
| <p>Loansome Doc allows users to request document delivery through mail, fax, pickup, or Email. Users should discuss these options with the library that will be providing the Loansome Doc service to determine which document delivery services are available to them.</p> | | |
| Each library sets its own document delivery service policies and charges. | | |
| <input type="button" value="Continue"/> | | |

- Enter the Library Identifier (LIBID) of your Ordering Library and click on the **Continue** button at the bottom of the screen to continue the registration process.

| NLM | Loansome Doc Registration | PubMed |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------|
| IDENTIFICATION INFORMATION | | |
| First Name : | <input type="text" value="Polly"/> | |
| Last Name : | <input type="text" value="Smith"/> | (required) |
| Title : | <input type="text" value="Librarian"/> | (e.g. MD, Ph.D, RN etc.) |
| ADDRESS INFORMATION | | |
| Address 1 : | <input type="text" value="Acme Library"/> | (required) |
| Address 2 : | <input type="text" value="12 Acme Blvd."/> | |
| City : | <input type="text" value="Bethesda"/> | (required) |
| State/Province : | <input type="text" value="Maryland"/> | (U.S. and Canada Only) |
| State/Province : | <input type="text"/> | (International Only) |
| Country : | <input type="text" value="USA"/> | (required) |
| Zip/Postal Code : | <input type="text" value="20894"/> | (required) |
| Phone country code : | <input type="text" value="1"/> | (required) Country Codes |
| Phone area code : | <input type="text" value="301"/> | (required) |
| Phone local number : | <input type="text" value="555-1212"/> | (required) |
| Phone Extension : | <input type="text" value="1234"/> | |
| Delivery Information | | |
| Method : | <input type="text" value="Mail"/> | |
| Fax country code : | <input type="text"/> | |
| Fax area code : | <input type="text"/> | |
| Fax local number: | <input type="text"/> | |
| Fax Extension : | <input type="text"/> | |
| Email : | <input type="text"/> | |
| IP address : | <input type="text"/> | |
| Print comment entered below on all orders. | | |
| Comment : | <input type="text" value="Account Number 123456"/> | |
| Authorize ordering library to obtain articles from other libraries if ordering library is unable to fill the request. | | |
| Authorize : <input type="radio"/> No <input checked="" type="radio"/> Yes | | |
| LOGIN INFORMATION | | |
| Enter a User ID and Password of your choice to use for all future orders. | | |
| User ID : | <input type="text" value="abc123"/> | (required) |
| Password : | <input type="password" value="*****"/> | (required) |
| Retype Password : | <input type="password" value="*****"/> | (required) |
| <input type="button" value="Register"/> | | |

- Next, you receive a screen explaining copyright compliance. Click on the **Accept** button.



NLM Loansome Doc Warning PubMed

Warning Concerning Copyright Compliance

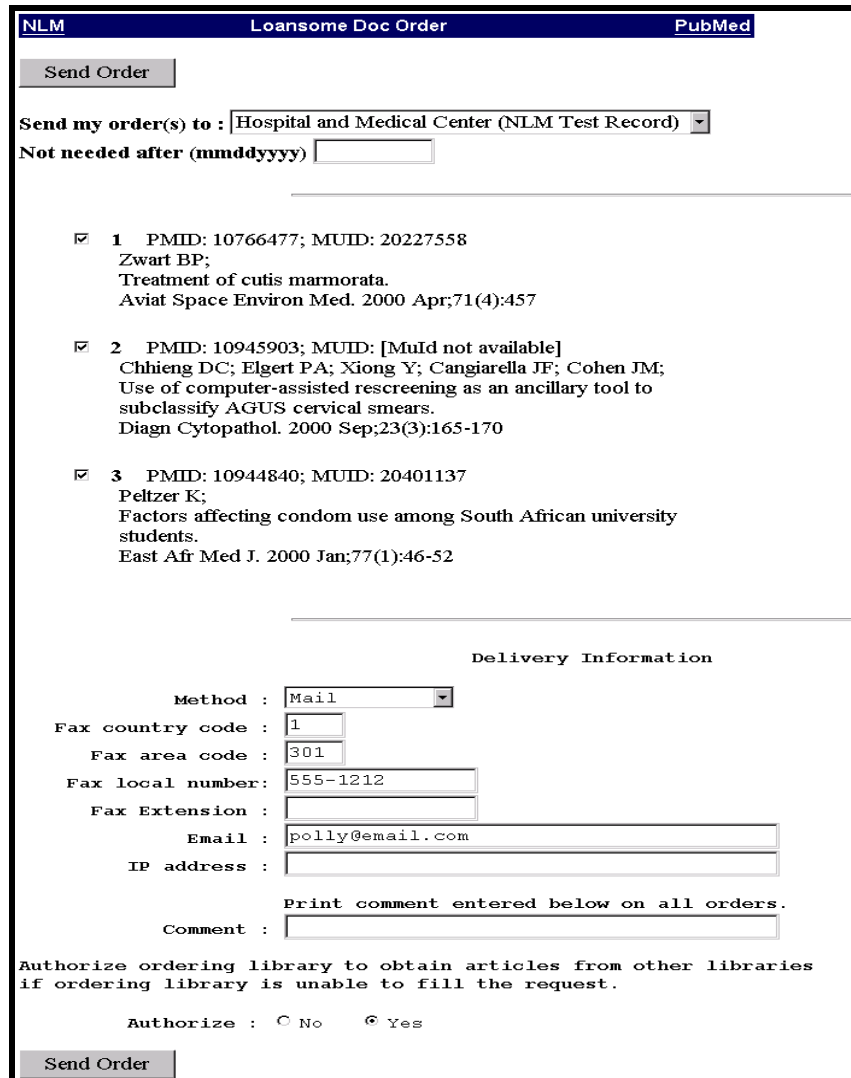
The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be used for any purpose other than private study, scholarship, or research. If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

Accept Decline

- PubMed now brings you to a screen confirming the citation(s) you are ordering and your user information. Click on the **Send Order** button after reviewing the information.

Articles you
checked off to
order.



NLM Loansome Doc Order PubMed

Send Order

Send my order(s) to : Hospital and Medical Center (NLM Test Record)

Not needed after (mmddyyyy)

☒ 1 PMID: 10766477; MUID: 20227558
Zwart BP;
Treatment of cutis marmorata.
Aviat Space Environ Med. 2000 Apr;71(4):457

☒ 2 PMID: 10945903; MUID: [MuId not available]
Chhieng DC; Elgert PA; Xiong Y; Cangiarella JF; Cohen JM;
Use of computer-assisted rescreeing as an ancillary tool to
subclassify AGUS cervical smears.
Diagn Cytopathol. 2000 Sep;23(3):165-170

☒ 3 PMID: 10944840; MUID: 20401137
Peltzer K;
Factors affecting condom use among South African university
students.
East Afr Med J. 2000 Jan;77(1):46-52

Delivery Information

Method : Mail

Fax country code : 1

Fax area code : 301

Fax local number: 555-1212

Fax Extension :

Email : polly@gmail.com

IP address :

Print comment entered below on all orders.

Comment :

Authorize ordering library to obtain articles from other libraries
if ordering library is unable to fill the request.

Authorize : ☐ No ☒ Yes

Send Order

Send Order
button.

- Next you are brought to the Loansome Doc Confirmation screen which confirms that your order was accepted.

*Request sent
messages.*

*User-supplied
information.*

| NLM | Loansome Doc order sent | PubMed |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------|
| Print or save a copy of this page for reference. | | |
| 3 Loansome Doc Requests - Aug 17, 2000 | | |
| Request # 341452 was sent to MDUBIX for: Treatment of cutis marmorata. 2000 Apr;71(4):457. MDUBIX does not report holding <i>Aviat Space Environ Med</i> . | | |
| Request # 341453 was sent to MDUBIX for: Use of computer-assisted rescreeing as an ancillary tool to subclassify AGUS cervical smears. 2000 Sep;23(3):165-170. MDUBIX does not report holding <i>Diagn Cytopathol</i> . | | |
| Request # 341454 was sent to MDUBIX for: Factors affecting condom use among South African university students. 2000 Jan;77(1):46-52. MDUBIX does not report holding <i>East Afr Med J</i> . | | |
| User Information | | |
| User ID: | ABC123 | |
| Name: | Polly Smith | |
| Address: | Acme Library 12 Acme Blvd. Bethesda MD 20894 USA | |
| Date: | Aug 17, 2000 | |
| Delivery Information | | |
| Mail to user's address. | | |
| Ordering library is authorized to obtain articles from other libraries, if necessary. | | |

NOTES

Links

Related Articles

- Citations in PubMed will have a **Related Articles** link. Clicking on this link will access the articles in PubMed which are most closely related to the original article.
- PubMed compares words from the Title and Abstract of each citation, as well as the MeSH headings assigned, using a powerful word-weighted algorithm.
- The best matches for each citation are saved and stored in a pre-calculated set.
- The Related Articles citation display is in rank order from most to least relevant. The citation you linked from is displayed first.
- You may see a few citations without a Related Articles link. This simply means the citation has not yet gone through the powerful algorithm. This process may take several days.



A detailed explanation of the **Related Articles algorithm** is available in the PubMed **Help** under **Links; Related Articles; Computation of Related Articles**.

Take Note:

Try this search: **killer pop machines**

The screenshot shows the PubMed search interface. At the top, there is a search bar with the text "killer pop machines" and buttons for "Go" and "Clear". Below the search bar are tabs for "Limits", "Preview/Index", "History", and "Clipboard". Underneath these tabs is a row of buttons: "Display", "Summary" (with a dropdown arrow), "Save", "Text", "Order", "Details", and "Add to Clipboard". The search results are listed below, starting with a checkbox and the number "1". The first result is "Spitz DJ, Spitz WU." with a red "Related Articles" link to its right. Below the author names is the title "Killer pop machines.", followed by the journal information "J Forensic Sci. 1990 Mar;35(2):490-2." and the PMID "2329341".

▼ for killer pop machines Go Clear

Limits Preview/Index History Clipboard

Display Summary ▼ Save Text Order Details Add to Clipboard

☐ 1: [Spitz DJ, Spitz WU.](#) Related Articles

Killer pop machines.
J Forensic Sci. 1990 Mar;35(2):490-2.
PMID: 2329341

Related Articles
link

You retrieve only 1 citation. Now, click on the **Related Articles** link and PubMed will display a list of related citations:

| | |
|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <input type="checkbox"/> 1: Spitz DJ, Spitz WU | Related Articles |
| Killer pop machines. J Forensic Sci. 1990 Mar;35(2):490-2. PMID: 2329341 | |
| <input type="checkbox"/> 2: Wragg P, Horsfall R | Related Articles |
| Exciting changes in vending machines. Health Serv J. 1988 Jul 21;98(5110):suppl 5. No abstract available. PMID: 10288618 | |
| <input type="checkbox"/> 3: Champa JR, Hennrikus WL, Gerardi JA, LaPoint JM | Related Articles |
| Four cases of injury involving soda vending machines. J Orthop Trauma. 1989;3(1):64-7. PMID: 2709207 | |

Refining your Related Articles retrieval set:

- Click History.
- The Related Articles link shows up as: Link to PubMed from (“PubMed Unique Identifier”)

| Limits | Preview/Index | History | Clipboard |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------|---------------------|
| <ul style="list-style-type: none"> • Search History will be lost after one hour of inactivity • To combine searches use # before search number, e.g., #2 AND #6 | | | |
| Search | Most Recent Queries | Time | Result |
| #2 | Link to PubMed from (2329341) | 15:12:44 | 114 |
| #1 | Search killer pop machines | 15:08:36 | 1 |

- Use the search statement number and combine with another concept:

Example:

#2 AND english [la]

- Alternatively, use the search statement number in the query box and a pull-down menu selection from the Limits screen:

Enter search
statement #
found in
History.

Select limit(s).

Click **Go**.

▼ for #2

Limits Preview/Index History Clipboard

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]
- Search [limits](#) may exclude PreMEDLINE and publisher supplied citations

Limited to:

All Fields ▼ ☐ only items with abstracts

Publication Types ▼ English ▼ Subsets ▼

Ages ▼ Human or Animal ▼ Gender ▼

Entrez Date ▼

Publication Date ▼ From To

Use the format YYYY/MM/DD; month and day are optional.

Links to Other Resources and NCBI Databases

- **LinkOut** - A service that provides external links from PubMed citations to publisher Web sites for full-text journal articles, biological data, sequence centers, etc. from third parties.
- **Books** - Provides links from individual PubMed journal citations to full-text of molecular biology textbooks .
- **Protein** - Protein sequences from Swiss-Prot, PIR, PRF, PDB, and translated protein sequences from the DNA sequences databases.
- **Nucleotide** - DNA sequences from GenBank, EMBL, and DDBJ.
- **PopSet** - The PopSet database contains aligned sequences submitted as a set from a population, phylogenetic or mutation study describing such events as evolution and population variation.
- **Structure** - The Molecular Modeling Database (MMDB) contains 3-dimensional structures determined by X-ray crystallography and NMR spectroscopy.
- **Genome** - Provides access to records and graphic displays of entire genomes and chromosomes for megabase sequences obtained from large-scale sequencing of genomes and chromosomes.
- **Free in PMC** - Provides links from PubMed journal citations to full-text of articles in PubMed Central (PMC).

Example: An article in the *Journal of Cell Biology* written by D. A. Starr.



starr da journal of cell biology

Notice the Related Articles, Books, Protein, Nucleotide, LinkOut links on the right:

Take Note:

- A publisher's icon link may display on the Abstract and Citation display formats.

☐ 1: *J Cell Biol* 1997 Sep 22;138(6):1289-301
 Related Articles, Books, Protein, Nucleotide, OMIM, LinkOut

Conservation of the centromere/kinetochore protein ZW10.

Starr DA, Williams BC, Li Z, Etemad-Moghadam B, Dawe RK, Goldberg ML

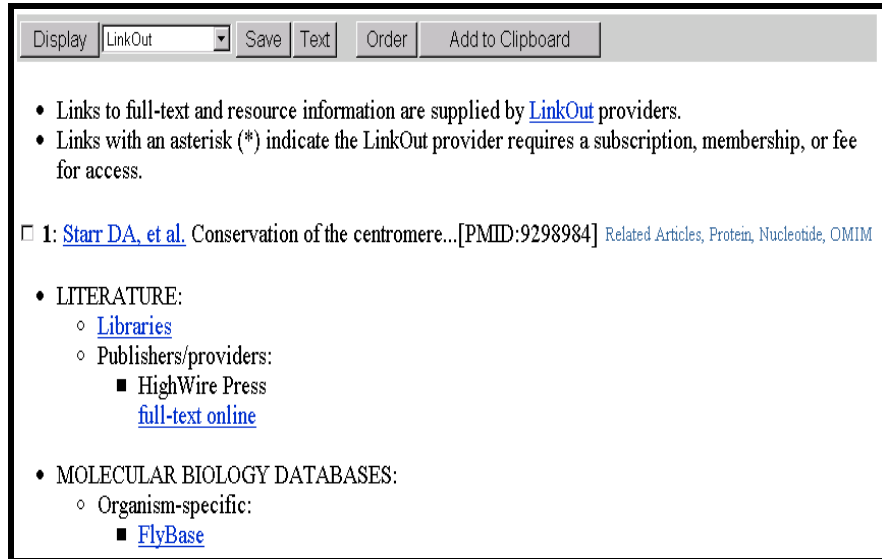
Section of Genetics and Development, Cornell University, Ithaca, New York 14853-2703, USA.

Mutations in the essential *Drosophila melanogaster* gene *zw10* disrupt chromosome segregation, producing chromosomes that lag at the metaphase plate during anaphase of mitosis and both meiotic divisions. Recent evidence suggests that the product of this gene, DmZW10, acts at the kinetochore as part of a tension-sensing checkpoint at anaphase onset. DmZW10 displays an intriguing cell cycle-dependent intracellular distribution, apparently moving from the centromere/kinetochore at prometaphase to kinetochore microtubules at metaphase, and back to the centromere/kinetochore at anaphase (Williams, B.C., M. Gatti, and M.L. Goldberg. 1996. *J. Cell Biol.* 134:1127-1140). We have identified ZW10-related proteins from widely diverse species with divergent centromere structures, including several Drosophilids, *Caenorhabditis elegans*, *Arabidopsis thaliana*, *Mus musculus*, and humans. Antibodies against the human ZW10 protein display a cell cycle-dependent staining pattern in HeLa cells strikingly similar to that previously observed for DmZW10 in dividing *Drosophila* cells. Injections of *C. elegans* ZW10 antisense RNA phenocopies important aspects of the mutant phenotype in *Drosophila*: these include a strong decrease in brood size, suggesting defects in meiosis or germline mitosis, a high percentage of lethality among the embryos that are produced, and the appearance of chromatin bridges at anaphase. These results indicate that at least some aspects of the functional role of the ZW10 protein in ensuring proper chromosome segregation are conserved across large evolutionary distances.

PMID: 9298984

LinkOut Link:

- Links to other providers appear on the LinkOut display format.



- The LinkOut format displays links (if available) by broad categories (e.g., Literature), and then by subject categories (e.g., Libraries) selected by the LinkOut provider.
- Click on the Libraries link to see the list of libraries providing full-text for the citation.
- Full-text provider links also include the form of the article available (e.g., PDF).
- Links with an asterisk indicate the LinkOut provider requires a subscription, membership, or fee for access.


**Take Note:**

Links are supplied to us by the providers; corrections and changes to links can be made only by the providers.

Linking back to PubMed from references

Links back to citations in PubMed are often provided within the references at the end of an article viewed from a publisher's Web site:

Click on **Medline** link to go to the PubMed record for this reference.

References 

1. Albertson, D.G., and J.N. Thomson. 1982. The kinetochores of *Caenorhabditis elegans*. *Chromosoma (Berl.)*. 86: 409-428 [[Medline](#)].
2. Albertson, D.G., and J.N. Thomson. 1993. Segregation of holocentric chromosomes at meiosis in the nematode, *Caenorhabditis elegans*. *Chromosome Res.* 1: 15-26 [[Medline](#)].
3. Ault, J.G., and T.W. Lyttle. 1988. A transmissible dicentric chromosome in *Drosophila melanogaster*. *Chromosoma (Berl.)*. 97: 71-79 .
4. Bai, C., P. Sen, K. Hofmann, L. Ma, M. Gobel, J.W. Harper, and S.J. Elledge. 1996. *SKP1* connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box. *Cell*. 86: 263-274 [[Medline](#)].
5. Bajer, A., and J. Mole-Bajer. 1969. Formation of spindle fibers, kinetochore orientation, and behavior of the nuclear envelope during mitosis in endosperm. *Chromosoma (Berl.)*. 27: 448-484 .
6. Barstead, R.J., and R.H. Waterson. 1989. The basal component of the nematode dense-body is vinculin. *J. Biol. Chem.* 264: 10177-10185 [[Medline](#)].

Clicking on the [Medline](#) link for the 4th reference brings you to that citation in PubMed:

Display
Abstract
Save
Text
Add to Clipboard

☐ 1: *Cell* 1996 Jul 26;86(2):263-74 [Related Articles](#), [Books](#), [Protein](#), [Nucleotide](#), [OMIM](#), [LinkOut](#)

SKP1 connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box.

Bai C, Sen P, Hofmann K, Ma L, Goehl M, Harper JW, Elledge SJ

Howard Hughes Medical Institute, Baylor College of Medicine, Houston, Texas 77030, USA.

We have identified the yeast and human homologs of the SKP1 gene as a suppressor of *cdc4* mutants and as a cyclin F-binding protein. Skp1p indirectly binds cyclin A/Cdk2 through Skp2p, and directly binds Skp2p, cyclin F, and Cdc4p through a novel structural motif called the F-box. SKP1 is required for ubiquitin-mediated proteolysis of Cin2p, Clb5p, and the Cdk inhibitor Sic1p, and provides a link between these molecules and the proteolysis machinery. A large number of proteins contain the F-box motif and are thereby implicated in the ubiquitin pathway. Different *skp1* mutants arrest cells in either G1 or G2, suggesting a connection between regulation of proteolysis in different stages of the cycle.

PMID: 8706131

Books Link:

- When viewing a PubMed abstract, click on the "Books" hyperlink.
- This takes you to a facsimile of the abstract, in which some phrases are hypertext links. These phrases correspond to terms that are also found in the books available at NCBI.

Note the
term
Drosophila
is a
hypertext
link.

1: J Cell Biol 1997 Sep 22;138(6):1289-301

FREE JCB

Conservation of the [centromere](#) / [kinetochore](#) protein ZW10.

Starr DA, Williams BC, Li Z, Etemad-Meghadam B, Dawe RK, Goldberg ML

Section of Genetics and Development, Cornell University, Ithaca, New York 14853-2703, USA.

[Mutations](#) in the essential [Drosophila](#) melanogaster gene [zw10](#) disrupt [chromosome segregation](#), producing [chromosomes](#) that lag at the [metaphase plate](#) during [anaphase](#) of [mitosis](#) and both [meiotic divisions](#). Recent evidence suggests that the product of this gene, DmZW10, acts at the [kinetochore](#) as part of a tension-sensing checkpoint at [anaphase](#) onset. DmZW10 displays an intriguing [cell cycle](#)-dependent intracellular distribution, apparently moving from the [centromere](#) / [kinetochore](#) at [prometaphase](#) to [kinetochore microtubules](#) at [metaphase](#), and back to the [centromere](#) / [kinetochore](#) at [anaphase](#) (Williams, B. C., M. Gatti, and M. L. Goldberg. 1996. J. Cell Biol. 134:1127-1140). We have identified ZW10-related proteins from widely diverse species with divergent [centromere](#) structures, including several [Drosophilids](#), [Caenorhabditis elegans](#), [Arabidopsis thaliana](#), [Mus musculus](#), and humans. [Antibodies](#) against the human ZW10 protein display a [cell cycle](#)-dependent staining pattern in HeLa cells strikingly similar to that previously observed for DmZW10 in dividing [Drosophila](#) cells. Injections of *C. elegans* ZW10 [antisense RNA](#) phenocopies important aspects of the [mutant phenotype](#) in [Drosophila](#): these include a strong decrease in brood size, suggesting defects in [meiosis](#) or germline [mitosis](#), a high percentage of lethality among the [embryos](#) that are produced, and the appearance of [chromatin](#) bridges at [anaphase](#). These results indicate that at least some aspects of the functional role of the ZW10 protein in ensuring proper [chromosome segregation](#) are conserved across large evolutionary distances.

MeSH Terms:

- Animal
- [Arabidopsis](#)
- [Caenorhabditis elegans](#)
- [Cell Cycle](#) / physiology
- [Centromere](#) / chemistry*
- [Chromosomes](#) / physiology
- Cloning, Molecular
- [Drosophila](#)
- HeLa Cells
- Human
- Insect Proteins/genetics*
- Insect Proteins/analysis*
- Mice
- [Microinjections](#)
- Molecular Sequence Data
- [Mutation](#) / physiology
- Recombinant [Fusion Proteins](#) / analysis
- RNA, Antisense/pharmacology
- [Sequence Homology](#), [Amino Acid](#)
- Support, U.S. Gov't, P.H.S.

- Clicking on a hypertext link (e.g., *Drosophila*) takes the reader to a list of book sections in which the phrase is found. The most relevant sections of the books to the phrase are listed first. The title of the section in which the phrase is found is hyperlinked to that part of the book.

Notice the
Overview,
Help, FAQ
links.

Click on
the first
book section
listed.

NCBI

TEXTBOOKS^a

THE NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION

PubMed Nucleotide Protein Genome Structure Popset

Search PubMed for [] Go Clear

☐ Limits Index History Clipboard

About Entrez

Books
Overview
Help | FAQ

Entrez PubMed
Search
Overview
Help | FAQ

Introduction
From: *Drosophila* and the Molecular Genetics of Pattern Formation. I. Genesis of the Body Plan > Cellular Mechanisms of Development
Molecular Biology of the Cell, 3rd edn, by Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J., 1994, *Garland Publishing, Inc.*


Introduction
From: *Drosophila* and the Molecular Genetics of Pattern Formation. II. Homeotic Selector Genes and the Patterning of Body Parts > Cellular Mechanisms of Development
Molecular Biology of the Cell, 3rd edn, by Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J., 1994, *Garland Publishing, Inc.*

The *Drosophila eve* Gene Is Regulated by Combinatorial Controls
From: How Genetic Switches Work > Control of Gene Expression
Molecular Biology of the Cell, 3rd edn, by Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J., 1994, *Garland Publishing, Inc.*


***Drosophila* and Yeast Genes Can Also Be Inactivated by Heritable Features of Chromatin Structure**
From: The Molecular Genetic Mechanisms That Create Specialized Cell Types > Control of Gene Expression
Molecular Biology of the Cell, 3rd edn, by Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J., 1994, *Garland Publishing, Inc.*

Complex Genetic Switches That Regulate *Drosophila* Development Are Built Up from Smaller Modules
From: How Genetic Switches Work > Control of Gene Expression
Molecular Biology of the Cell, 3rd edn, by Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J., 1994, *Garland Publishing, Inc.*

- That part of the book is then displayed:



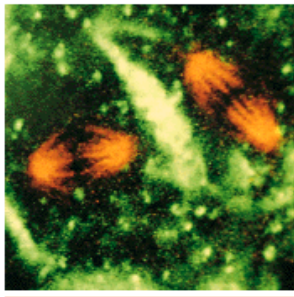
MOLECULAR BIOLOGY OF THE CELL



PUBMED
NCBI HOME PAGE
MOLECULAR BIOLOGY OF THE CELL HOME PAGE

Cellular Mechanisms of Development

Drosophila and the Molecular Genetics of Pattern Formation. I. Genesis of the Body Plan⁴¹



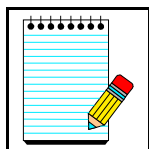
Introduction

The structure of an organism is controlled by its genes: classical genetics is based on this proposition. Yet for almost a century, and even long after the role of DNA in inheritance had become clear, the mechanisms of the genetic control of body structure remained an intractable mystery. In recent years this chasm in our understanding has begun to be filled. In the previous section we used the nematode worm to illustrate some of the general principles of how developmental control genes orchestrate the events of development. But it is the fly *Drosophila melanogaster* (Figure 21-47), more than any other organism, that has really transformed our understanding of how genes govern the patterning of the body. Decades of genetic study, culminating in massive systematic searches, have yielded a large catalogue of developmental control genes in the fly whose specific function is to define the spatial pattern of cell types and body parts. It has become possible not only to identify the key genes, but also to watch them at work: by *in situ* hybridization using DNA or RNA probes, one can observe directly how the internal states of the cells in the embryo are defined by the sets of regulatory genes that they express. By analyzing mutants, transgenic animals, and animals that are a patchwork of mutant and nonmutant cells, one can go on to discover how each gene operates as part of a system to specify the organization of the body. Moreover, the fly has provided a crucial key to our own development; for the genes controlling the pattern of the body in *Drosophila* turn out to have close counterparts in higher animals, including ourselves.

Our account of *Drosophila* developmental genetics is divided into two sections. The first deals with events in the early embryo and describes how the basic body plan is created, with a head rudiment at one end, a posterior rudiment at the other, and in between them an ordered series of segments - the basic modular units from which all insects are constructed. The second section deals with later events and discusses the genetic apparatus that endows cells with positional values that make the cells of one segment different from those of the next; these processes ensure that, for example, the head will develop antennae and the thorax legs - and not, as happens in some mutants we shall encounter, the other way around.

Outline

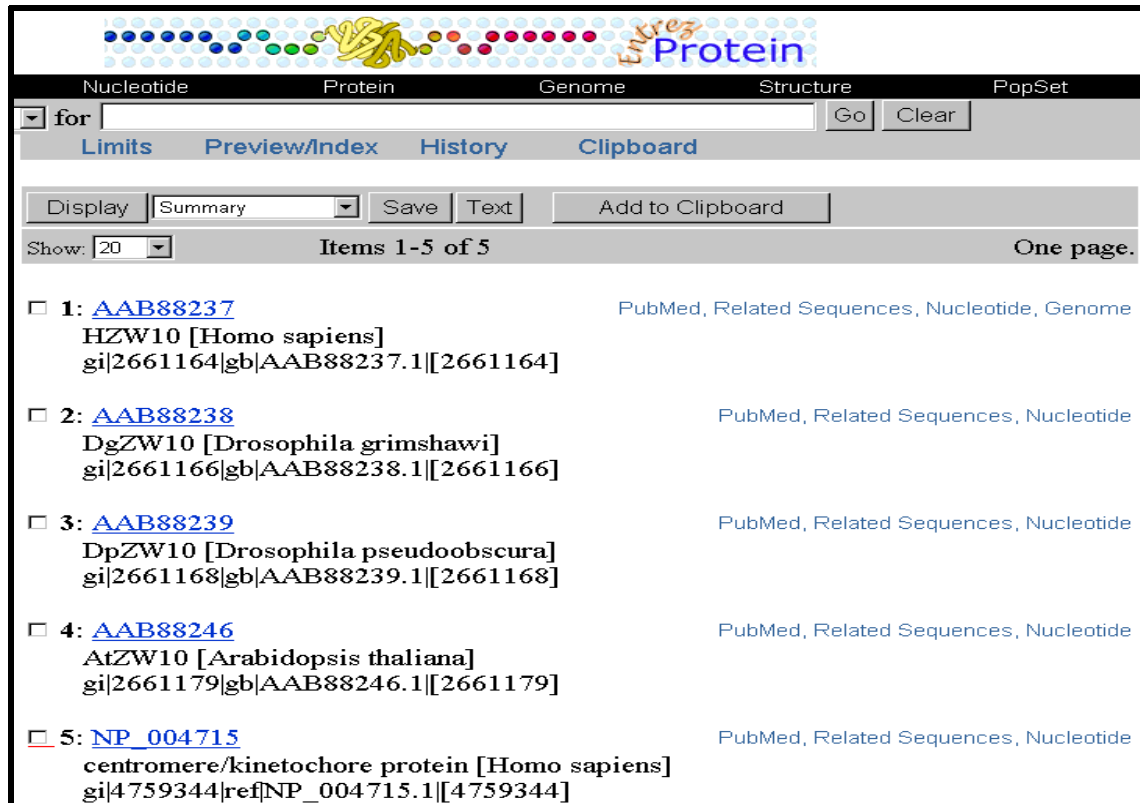
- Introduction
- The Insect Body Is Constructed by Modulation of a Fundamental Pattern of Repeating Units
- Drosophila Begins Its Development as a Syncytium
- Two Orthogonal Systems Define the Ground Plan of the Embryo
- The Patterning of the Embryo Begins with Influences from the Cells Surrounding the Egg



Take Note:

When you are on the textbook linking list page (as on the previous page), you will see an Overview, Help, and FAQs specific for the Books feature.

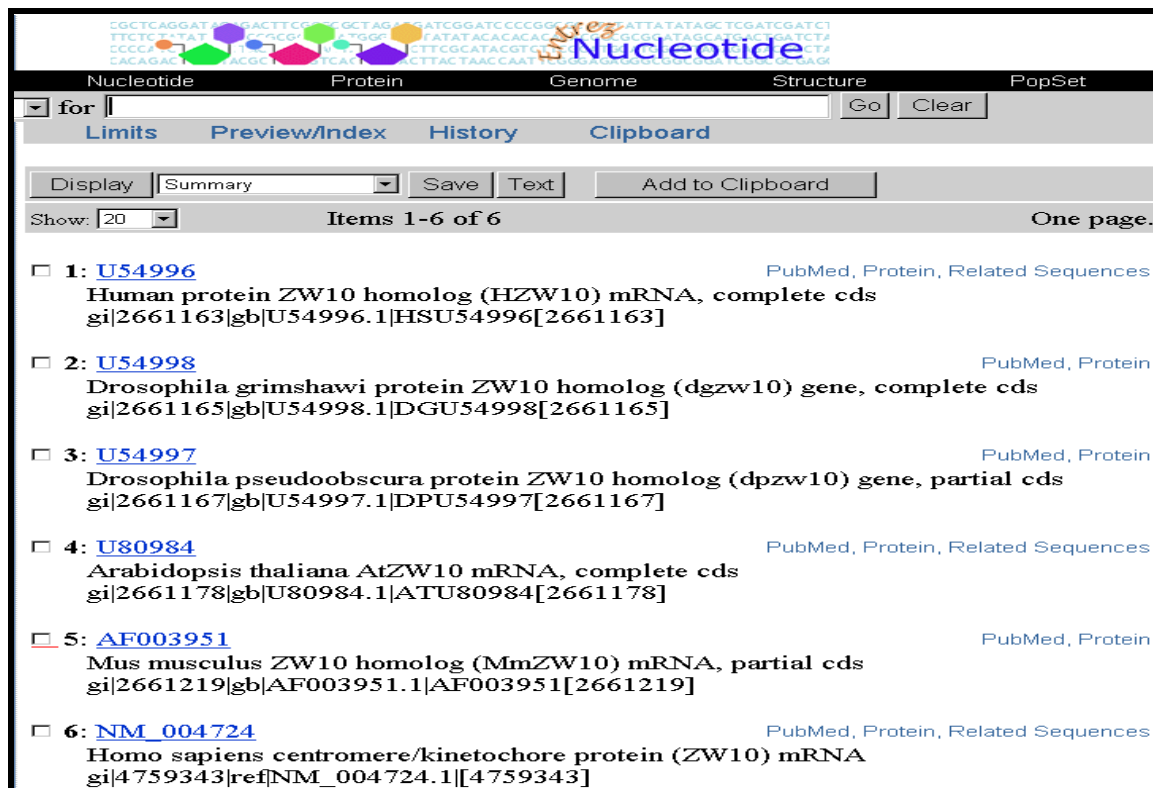
Protein Link:



The Entrez Protein search interface shows a search for "for" with results 1-5 of 5. The interface includes tabs for Nucleotide, Protein, Genome, Structure, and PopSet. Below the search bar are buttons for Limits, Preview/Index, History, and Clipboard. A display summary is shown, with options to Save, Text, and Add to Clipboard. The results list includes:

- 1: AAB88237** PubMed, Related Sequences, Nucleotide, Genome
HZW10 [Homo sapiens]
gi|2661164|gb|AAB88237.1|[2661164]
- 2: AAB88238** PubMed, Related Sequences, Nucleotide
DgZW10 [Drosophila grimshawi]
gi|2661166|gb|AAB88238.1|[2661166]
- 3: AAB88239** PubMed, Related Sequences, Nucleotide
DpZW10 [Drosophila pseudoobscura]
gi|2661168|gb|AAB88239.1|[2661168]
- 4: AAB88246** PubMed, Related Sequences, Nucleotide
AtZW10 [Arabidopsis thaliana]
gi|2661179|gb|AAB88246.1|[2661179]
- 5: NP_004715** PubMed, Related Sequences, Nucleotide
centromere/kinetochore protein [Homo sapiens]
gi|4759344|ref|NP_004715.1|[4759344]

Nucleotide Link:



The Entrez Nucleotide search interface shows a search for "for" with results 1-6 of 6. The interface includes tabs for Nucleotide, Protein, Genome, Structure, and PopSet. Below the search bar are buttons for Limits, Preview/Index, History, and Clipboard. A display summary is shown, with options to Save, Text, and Add to Clipboard. The results list includes:

- 1: U54996** PubMed, Protein, Related Sequences
Human protein ZW10 homolog (HZW10) mRNA, complete cds
gi|2661163|gb|U54996.1|HSU54996[2661163]
- 2: U54998** PubMed, Protein
Drosophila grimshawi protein ZW10 homolog (dgzw10) gene, complete cds
gi|2661165|gb|U54998.1|DGU54998[2661165]
- 3: U54997** PubMed, Protein
Drosophila pseudoobscura protein ZW10 homolog (dpzw10) gene, partial cds
gi|2661167|gb|U54997.1|DPU54997[2661167]
- 4: U80984** PubMed, Protein, Related Sequences
Arabidopsis thaliana AtZW10 mRNA, complete cds
gi|2661178|gb|U80984.1|ATU80984[2661178]
- 5: AF003951** PubMed, Protein
Mus musculus ZW10 homolog (MmZW10) mRNA, partial cds
gi|2661219|gb|AF003951.1|AF003951[2661219]
- 6: NM_004724** PubMed, Protein, Related Sequences
Homo sapiens centromere/kinetochore protein (ZW10) mRNA
gi|4759343|ref|NM_004724.1|[4759343]

Free in PMC Link:

- The first links from PubMed citations to the free full-text of articles in PubMed Central were added in August 2000.
- PubMed Central (PMC) [<http://www.pubmedcentral.nih.gov/>] is the National Institutes of Health's repository for peer-reviewed primary research reports in the life sciences.

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------|
| <p>1: Tang Y, Schon EA, Wilichowski E, Vazquez-Memije ME, Davidson E, King MP</p> <p>Rearrangements of human mitochondrial DNA (mtDNA): new insights into the regulation of mtDNA copy number and gene expression.</p> <p>Mol Biol Cell. 2000 Apr;11(4):1471-85.</p> <p>PMID: 10749943</p> | <p>Free in PMC Related Articles</p> | <p><i>Free in PMC link indicates full-text available in PubMed Central.</i></p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------|

- Click on **Free in PMC** to link to the PubMed abstract display format.

PubMed Central - access FREE full text articles icon links to full-text of article in PubMed Central.

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <p>1: <i>Mol Biol Cell</i> 2000 Apr;11(4):1471-85</p> <p>FREE full text article at www.molbiolcell.org</p> <p>PubMed Central access FREE full text articles</p> <p>Rearrangements of human mitochondrial DNA (mtDNA): new insights into the regulation of mtDNA copy number and gene expression.</p> <p>Tang Y, Schon EA, Wilichowski E, Vazquez-Memije ME, Davidson E, King MP</p> <p>Department of Genetics and Development, Columbia University, New York, New York 10032, USA. yt62@columbia.edu</p> <p>Mitochondria from patients with Kearns-Sayre syndrome harboring large-scale rearrangements of human mitochondrial DNA (mtDNA; both partial deletions and a partial duplication) were introduced into human cells lacking endogenous mtDNA. Cytoplasmic hybrids containing 100% wild-type mtDNA, 100% mtDNA with partial duplications, and 100% mtDNA with partial deletions were isolated and characterized. The cell lines with 100% deleted mtDNAs exhibited a complete impairment of respiratory chain function and oxidative phosphorylation. In contrast, there were no detectable respiratory chain or protein synthesis defects in the cell lines with 100% duplicated mtDNAs. Unexpectedly, the mass of mtDNA was identical in all cell lines, despite the fact that different lines contained mtDNAs of vastly different sizes and with different numbers of replication origins, suggesting that mtDNA copy number may be regulated by tightly controlled mitochondrial dNTP pools. In addition, quantitation of mtDNA-encoded RNAs and polypeptides in these lines provided evidence that mtDNA gene copy number affects gene expression, which, in turn, is regulated at both the post-transcriptional and translational levels.</p> <p>PMID: 10749943</p> | <p>Related Articles, Books, LinkOut</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|

- Click on the **PubMed Central - access Free full text articles** icon to link to the free full-text in PubMed Central.

Portion of free full-text article in PubMed Central.

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | |
| PUBMED CENTRAL Article abstract PDF Contents | <p>Copyright (c) 2000, The American Society for Cell Biology. <i>MOL BIOL CELL</i>: April 2000; 11 (4): 1471-1485</p> |
| PUBMED PubMed abstract Related Articles Articles by: Tang Y. Schon E.A. Wilchows... E. Vazquez-M... M.E. Davidson E. King M.P. | <h2 style="text-align: center;">Rearrangements of Human Mitochondrial DNA (mtDNA): New Insights into the Regulation of mtDNA Copy Number and Gene Expression</h2> <p style="text-align: center;">Yingying Tang^{*,†}, Eric A. Schon^{*,†}, Ekkehard Wilchowski[§], Martel E. Vazquez-Memije[¶], Edgar Davidson[¶], and Michael P. King[¶]</p> <p>Departments of *Genetics and Development and[†] Neurology, Columbia University, New York, New York 10032; [§]Universitäts-Kinderklinik, Abteilung Pädiatrie/Neuropädiatrie, D-37075 Göttingen, Germany,[¶] Unidad de Investigación Médica en Genética Humana, Hospital de Pediatría, Centro Médico Nacional, Mexico City, Mexico D.F. 03020; and [¶]Department of Biochemistry and Molecular Pharmacology, Thomas Jefferson University, Philadelphia, Pennsylvania 19107</p> <p>Submitted November 23, 1999; Revised January 20, 2000; Accepted February 1, 2000 Monitoring Editor: Joseph Gall</p> <p style="text-align: right;">Publication date: April 1 2000</p> |
| OUTLINE Top Introduction Materials and Methods Results Discussion References | ABSTRACT <p>Mitochondria from patients with Kearns-Sayre syndrome harboring large-scale rearrangements of human mitochondrial DNA (mtDNA; both partial deletions and a partial duplication) were introduced into human cells lacking endogenous mtDNA. Cytoplasmic hybrids containing 100% wild-type mtDNA, 100% mtDNA with partial duplications, and 100% mtDNA with partial deletions were isolated and characterized. The cell lines with 100% deleted mtDNAs exhibited a complete impairment of respiratory chain function and oxidative phosphorylation. In contrast, there were no detectable respiratory chain or protein synthesis defects in the cell lines with 100% duplicated mtDNAs. Unexpectedly, the mass of mtDNA was identical in all cell lines, despite the fact that different lines contained mtDNAs of vastly different sizes and with different numbers of replication origins, suggesting that mtDNA copy number may be regulated by tightly controlled mitochondrial dNTP pools. In addition, quantitation of mtDNA-encoded RNAs and polypeptides in these lines provided evidence that mtDNA gene copy number affects gene expression, which, in turn, is regulated at both the post-transcriptional and translational levels.</p> |

The full-text can be viewed both as HTML through your web browser and in downloadable PDF format.

NOTES

Practice Exercises

1. Using only the query box, find some information about using a living donor for a liver transplantation. Using Limits, further restrict the search to only review articles. Display the results so you can see the MeSH headings and the entire retrieval is on one page.
2. Find the title, “Baby walkers--an underestimated hazard for our children?” Link from an author to see the Abstract. Review the related articles.
3. Are there articles by George Barrera-Hernandez referenced in MEDLINE?
4. Locate citations about using a baboon for a bone marrow transplant that were published between 1997-2000.
5. Please find information about wisdom tooth pain. Using the Details screen, determine what MeSH heading wisdom tooth maps to.

Suggested Answers:

- Using only the query box, find some information about using a living donor for a liver transplantation. Using Limits, further restrict the search to only review articles. Display the results so you can see the MeSH headings and the entire retrieval is on one page.

for living donor liver transplantation Go Clear

☒ Limits Preview/Index History Clipboard

PubMed Query:

```
((("living donors"[MeSH Terms] OR living donor[Text Word]) AND ("liver transplantation"[MeSH Terms] OR liver transplantation[Text Word])) AND Review[ptyp])
```

Search URL

Result:

[42](#)

Translations:

| | |
|-----------------------------------|---------------------------------------------------------------------------|
| living donor[All Fields] | ("living donors"[MeSH Terms] OR living donor[Text Word]) |
| liver transplantation[All Fields] | ("liver transplantation"[MeSH Terms] OR liver transplantation[Text Word]) |

Database:

PubMed

User Query:

living donor liver transplantation

Display the results so you can see the MeSH headings and the entire retrieval is on one page.

Use *Citation* display.

Use the *Show* pull-down menu.

for living donor liver transplantation Go Clear

☒ Limits Preview/Index History Clipboard

Limits: Review

Display Citation Save Text Order Details Add to Clipboard

Show: 50 Items 1-42 of 42 One page.

- Find the title, “Baby walkers--an underestimated hazard for our children?” Link to see the Abstract. Review the related articles.

Find the requested title:

Include the Boolean AND between title words.

*Use the **Title Word** pull-down menu selection.*

The screenshot shows the PubMed search interface. At the top, there is a search bar with the query "baby AND walkers AND underestimated AND hazar" and buttons for "Go" and "Clear". Below the search bar are tabs for "Limits", "Preview/Index", "History", and "Clipboard". A list of search tips is displayed:

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]
- Search [limits](#) may exclude PreMEDLINE and publisher supplied citations

Below the tips is a section titled "Limited to:" with various filters:

- Title Word (pull-down menu)
- ☐ only items with abstracts
- Publication Types (pull-down menu)
- Languages (pull-down menu)
- Subsets (pull-down menu)
- Ages (pull-down menu)
- Human or Animal (pull-down menu)
- Gender (pull-down menu)
- Entrez Date (pull-down menu)
- Publication Date (pull-down menu) From [] [] [] To [] [] []

At the bottom, it says: "Use the format YYYY/MM/DD; month and day are optional."

Use the **Abstract** display to see the abstract. Click on **Related Articles** link to review the related articles.

3. Are there articles by George Barrera-Hernandez referenced in MEDLINE?

for barrera-hernandez g

GoClear

LimitsPreview/IndexHistoryClipboard

PubMed Query:

barrera-hernandez g[Author Name]

SearchURL

Result:

[6](#)

Database:

PubMed

User Query:

barrera-hernandez g

4. Locate citations about using a baboon for a bone marrow transplant that were published between 1997-2000.

baboon bone marrow transplant

[Limits](#) [Index](#) [History](#) [Clipboard](#)

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]

Limited to:

All Fields

Publication Types Languages Subsets

Ages Human or Animal Gender

Entrez Date

Publication Date From 1997 To 2000

Use the format YYYY/MM/DD; month and day are optional.

5. Please find information about wisdom tooth pain. Using the Details screen, determine what MeSH heading wisdom tooth maps to.

Molar, Third is the MeSH heading that PubMed is mapping to.

for wisdom tooth pain

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

PubMed Query:

```
((("molar, third"[MeSH Terms] OR wisdom tooth[Text Word]) AND ("pain"[MeSH Terms] OR pain[Text Word]))
```

Result:
353

Translations:

| | |
|--------------------------|---------------------------------------------------------|
| wisdom tooth[All Fields] | ("molar, third"[MeSH Terms] OR wisdom tooth[Text Word]) |
| pain[All Fields] | ("pain"[MeSH Terms] OR pain[Text Word]) |

Database:
PubMed

User Query:
wisdom tooth pain

NOTES

Searching with MeSH

Two selections are available for MeSH searching from the field selection pull-down menu from Limits:

- **MeSH Terms**

Use when you want to qualify a term so that it is searched only as a MeSH heading. Unqualified search terms that are MeSH headings will automatically be searched as a MeSH term *as well as* a Text Word.



When a term is searched as a MeSH heading, PubMed automatically searches that heading and the more specific headings underneath in the hierarchy. This is called exploding a term.

Take Note:

For example, the MeSH term **Face** when searched as MeSH Term in PubMed would search the heading Face as well as all the more specific terms below the term in the hierarchy:

Face

- Cheek
- Chin
- Eye
 - Eyebrows
 - Eyelids
 - Eyelashes
- Forehead
- Mouth
 - Lip
- Nose



Searching with MeSH terms will *exclude* PREMEDLINE citations and publisher-supplied citations as they have not been indexed with MeSH headings.

Take Note:

- **MeSH Major Topic**

Use when you wish to limit to articles where the topic is the main point of the article.

PubMed's MeSH Browser

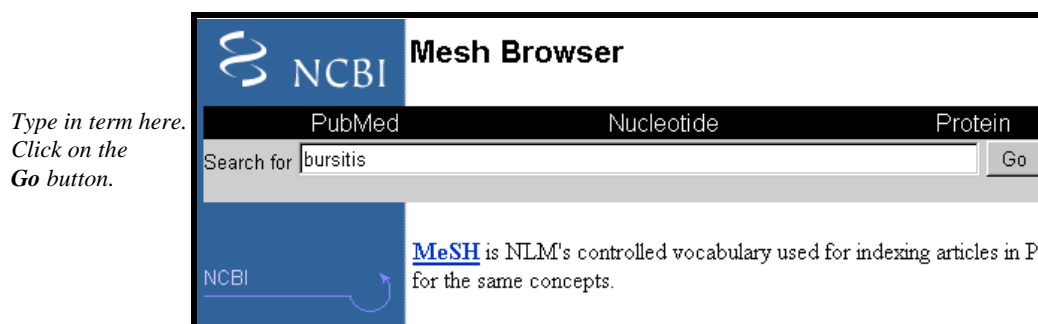
PubMed's MeSH Browser allows you to:

- Display MeSH terms in a hierarchical structure.
- Select MeSH terms for searching.
- Limit MeSH terms to a major concept.
- Attach subheadings.
- Display the preferred MeSH term and its hierarchy if a cross reference is entered.

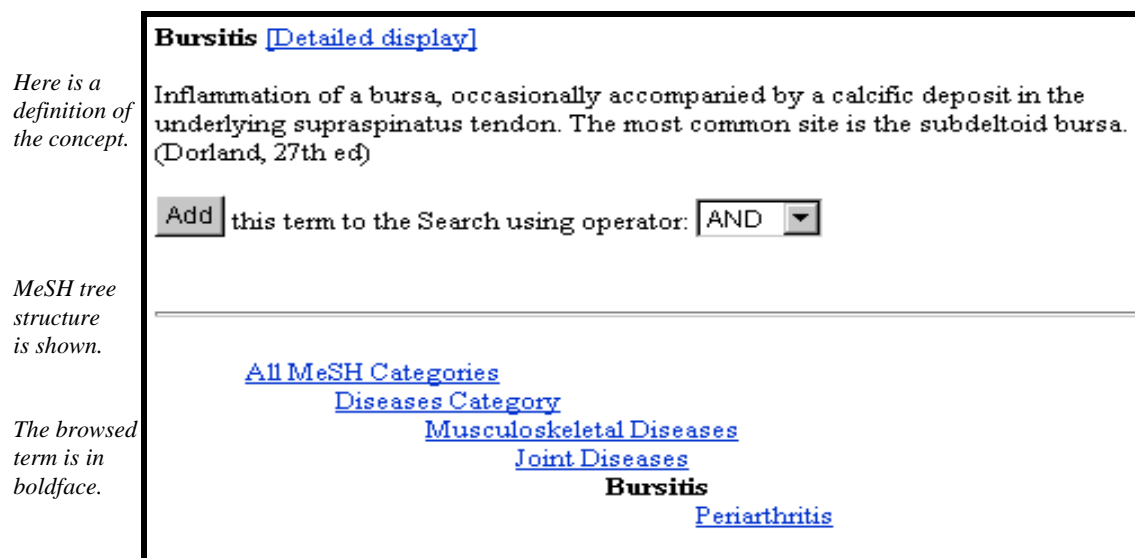
How to Get There

- Click on **MeSH Browser** on the sidebar.

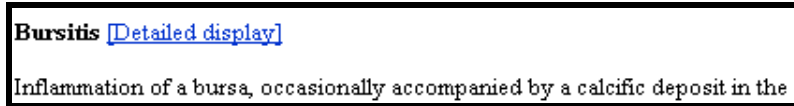
Now, let's use the MeSH Browser to build a search strategy for a search for citations about **bursitis**.



PubMed brings you to this MeSH Browser screen:



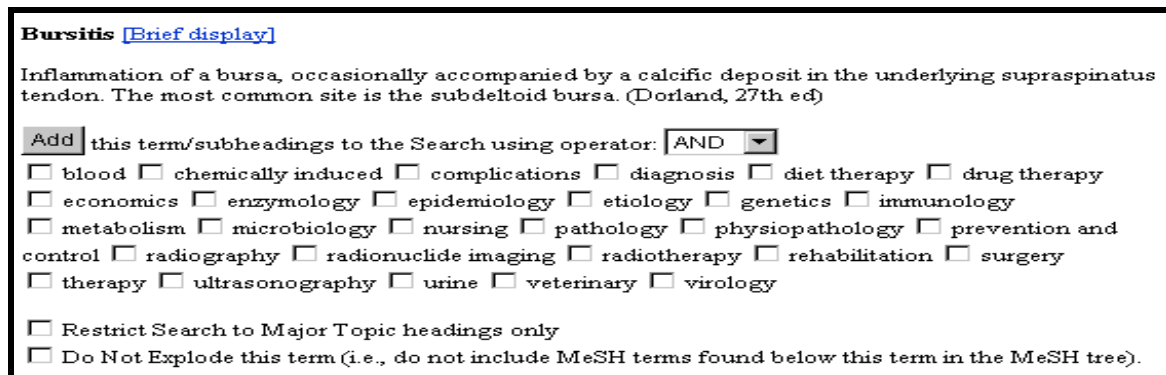
Click on the **Detailed Display** link to the right of the browsed term at the top of the screen as shown below:



This will bring you to another screen providing more information about the browsed term.

- You may search on this term or add this term to an existing strategy. At the same time you may select one or several subheadings, restrict the search to this term as a major point, or select not to explode the MeSH term

Detailed display screen for Bursitis



- Use the **Add** button to add the term to your search.
- You can also change the Boolean operator.
- Subheadings that have been attached to the term on current MEDLINE citations are listed.
- You may also restrict to a major point or choose not to explode the term.

Now, let's adjust our search to:

Citations about the *diagnosis* of bursitis

Select the diagnosis subheading from the MeSH browser screen's Detailed Display. Click on **Add** button when selections are complete.

Bursitis [\[Brief display\]](#)

Inflammation of a bursa, occasionally accompanied by a calcific deposit in the underlying supraspinatus tendon. The most common site is the subdeltoid bursa. (Dorland, 27th ed)

Add this term/subheadings to the Search using operator: **AND**

☐ blood ☐ chemically induced ☐ complications ☒ diagnosis ☐ diet therapy ☐ drug therapy
☐ economics ☐ enzymology ☐ epidemiology ☐ etiology ☐ genetics ☐ immunology
☐ metabolism ☐ microbiology ☐ nursing ☐ pathology ☐ physiopathology ☐ prevention and control ☐ radiography ☐ radionuclide imaging ☐ radiotherapy ☐ rehabilitation ☐ surgery
☐ therapy ☐ ultrasonography ☐ urine ☐ veterinary ☐ virology

☐ Restrict Search to Major Topic headings only
☐ Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

The MeSH Browser Current Query displays your search strategy. You may also look up another term in the query box.

Now, let's adjust our search and **specifically look for articles discussing the diagnosis of bursitis in the knee joint.**

Enter **knee joint** in the query box, click **Go**.

Searching on
the next term.

Here's the
strategy being
built.

Search for

NCBI

PubMed

Search

Overview

bursitis/diagnosis[MESH]

PubMed Search

This brings you to the MeSH Browser screen for **Knee Joint**. Next click on the **Detailed Display** link to see more information about this term.

Let's restrict to citations that have been indexed to indicate that the major focus of the article is knee joints and add this term to the strategy we are building.

Click here to restrict to a Major Topic.

Knee Joint [\[Brief display\]](#)

Add this term/subheadings to the Search using operator: **AND**

☐ abnormalities ☐ analysis ☐ anatomy and histology ☐ blood supply ☐ chemistry ☐ cytology
☐ drug effects ☐ embryology ☐ enzymology ☐ growth and development ☐ immunology
☐ injuries ☐ innervation ☐ metabolism ☐ microbiology ☐ parasitology ☐ pathology
☐ physiology ☐ physiopathology ☐ radiation effects ☐ radiography ☐ radionuclide imaging
☐ secretion ☐ surgery ☐ transplantation ☐ ultrasonography ☐ ultrastructure ☐ virology

☒ Restrict Search to Major Topic headings only
☐ Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

Once you have checked off **Restrict Search to Major Topic headings only**, click the **Add** button to continue building our strategy:

bursitis/diagnosis[MESH] AND knee joint[MAJR]

PubMed Search

Click on the **PubMed Search** button to actually run the search in PubMed.

NOTES

Practice Exercises

Try using the MeSH Browser for searches that require the use of MeSH headings.

1. Find articles discussing the diagnosis of prostate cancer as the main focus of the article. Then limit to articles entered into PubMed in the last 2 years.

2. Find citations to articles discussing the surgical or drug treatment of osteosarcoma in children. Limit to studies involving the drug, cisplatin. Osteosarcoma should be the main point of the article. Also, limit to English language articles.

3. Find citations to references discussing the economics of community-acquired pneumonia.

4.
 - a. Find information on automatic term mapping in PubMed's online Help.

 - b. You need to explain to someone how to import PubMed records into a bibliographic management program such as EndNotes® or Reference Manager®. Use PubMed's FAQs to find this answer.

Suggested Answers:

1. Find articles discussing the diagnosis of prostate cancer as the main focus of the article. Then limit to articles entered into PubMed in the last 2 years.

MeSH Browser screen:

prostate cancer is not a MeSH term, but it is associated with the MeSH term **Prostatic Neoplasms**

Prostatic Neoplasms [\[Detailed display\]](#)

this term to the Search using operator:

Term **Prostatic Neoplasms** appears in more than one place in the MeSH tree.

Choosing diagnosis subheading and restricting to major:

Prostatic Neoplasms [\[Brief display\]](#)

this term/subheadings to the Search using operator:

☐ analysis ☐ blood ☐ blood supply ☐ cerebrospinal fluid ☐ chemically induced ☐ chemistry
☐ classification ☐ complications ☐ congenital ☒ diagnosis ☐ diet therapy ☐ drug therapy
☐ economics ☐ embryology ☐ enzymology ☐ epidemiology ☐ ethnology ☐ etiology ☐ genetics
☐ history ☐ immunology ☐ metabolism ☐ microbiology ☐ mortality ☐ nursing ☐ parasitology
☐ pathology ☐ physiopathology ☐ prevention and control ☐ psychology ☐ radiography
☐ radionuclide imaging ☐ radiotherapy ☐ rehabilitation ☐ secondary ☐ secretion ☐ surgery
☐ therapy ☐ transmission ☐ ultrasonography ☐ ultrastructure ☐ urine ☐ veterinary ☐ virology

☒ Restrict Search to Major Topic headings only
☐ Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

Returned to PubMed with our search strategy built within the MeSH Browser. Now, restrict to those citations entered into the database in the last 2 years:

Prostatic Neoplasms/diagnosis[MAJR] Go Clear

Limits Index History Clipboard

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]

Limited to:

MeSH Terms

Publication Types Languages Subsets

Ages Human or Animal Gender

2 Years

Publication Date From To

Use the format YYYY/MM/DD; month and day are optional.

2. Find citations to articles discussing the surgical or drug treatment of osteosarcoma in children. Limit to studies involving the drug, cisplatin. Osteosarcoma should be the main point of the article. Also, limit to English language articles.

{osteosarcoma/drug therapy[MAJR] OR osteosarc Go Clear

Limits Index History Clipboard

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]

Limited to:

MeSH Terms

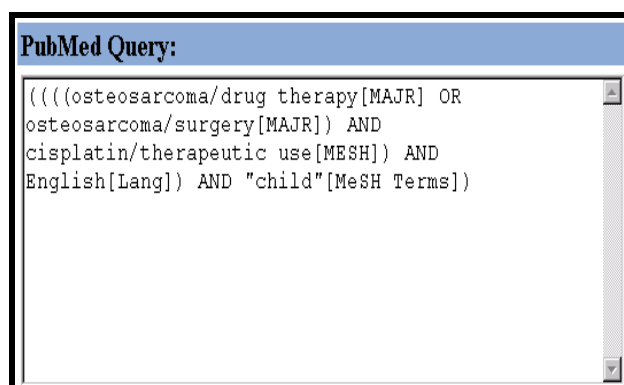
Publication Types English Subsets

All Child: 0-18 years Human or Animal Gender

Entrez Date

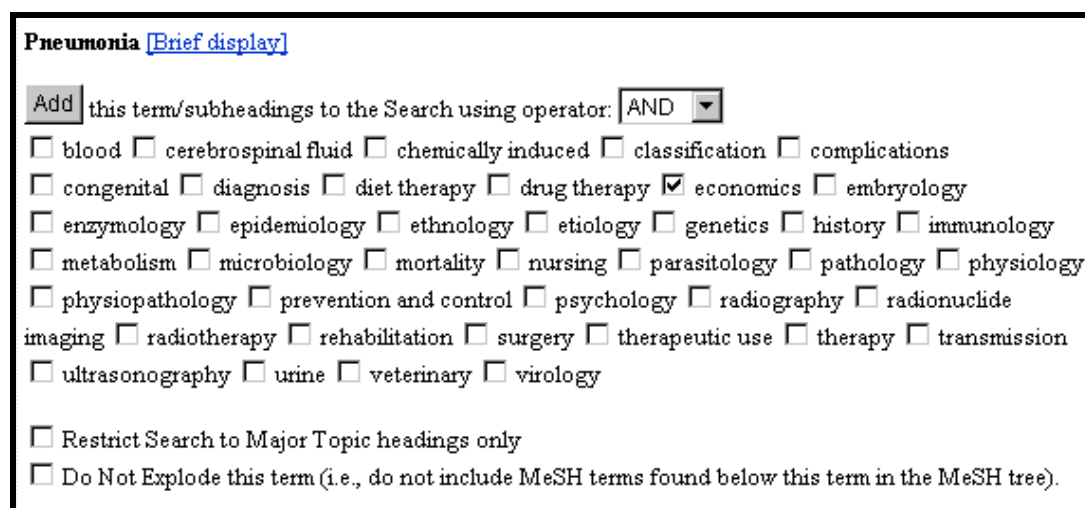
Publication Date From To

Use the format YYYY/MM/DD; month and day are optional.

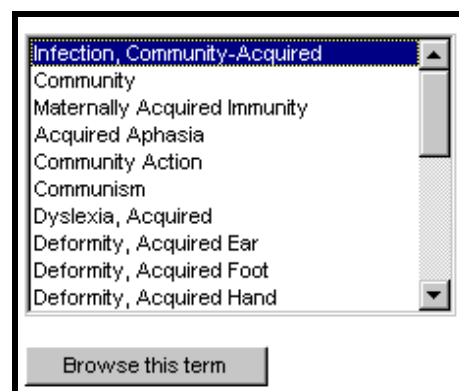


3. Find citations to references discussing the economics of community-acquired pneumonia.

Select the subheading of economics to attach to the MeSH heading, pneumonia from the Detailed display in the MeSH Browser:



Next, the MeSH Browser does not find an exact match for community acquired but leads us to this list of available terms. The term, Infection, Community-Acquired is now browsed. This leads us to Community-Acquired Infection which is Added to our strategy and returned to PubMed.



4.

a. Find information on automatic term mapping in PubMed's online Help.

1. Click on **Help** in PubMed's sidebar.
2. Click on **Automatic Term Mapping** under **PubMed Searching**.

b. You need to explain to someone how to import PubMed records into a bibliographic management program such as EndNotes® or Reference Manager®. Use PubMed's FAQs to find this answer.

1. Click on **FAQ** in PubMed's sidebar.
2. Click on **Can I import PubMed search results into a bibliographic management program?** under **The New PubMed**.

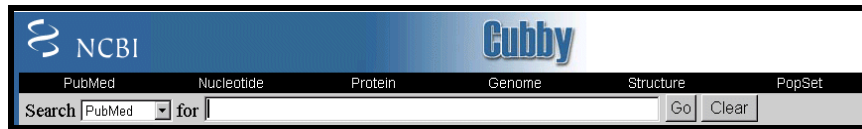


A quick way to locate information on a Web page is to use the **Find** (in Page) feature under the **Edit** menu of your **Web browser**.

Take Note:

NOTES

Cubby



Although this workbook provides instruction on Registering for the Cubby and what to do if you've forgotten or want to change your Cubby Password, these procedures are not discussed during class time.

Take Note:

The Cubby currently has two functions:

- The Cubby stores searches that can be updated at any time from any computer (to check for new items since you last checked), and;
- The Cubby stores LinkOut preferences that specify which LinkOut providers you want displayed in PubMed.



To use the Cubby your web browser must be set to accept cookies.

Take Note:

Getting to the Cubby

- Click on Cubby on the PubMed Sidebar.

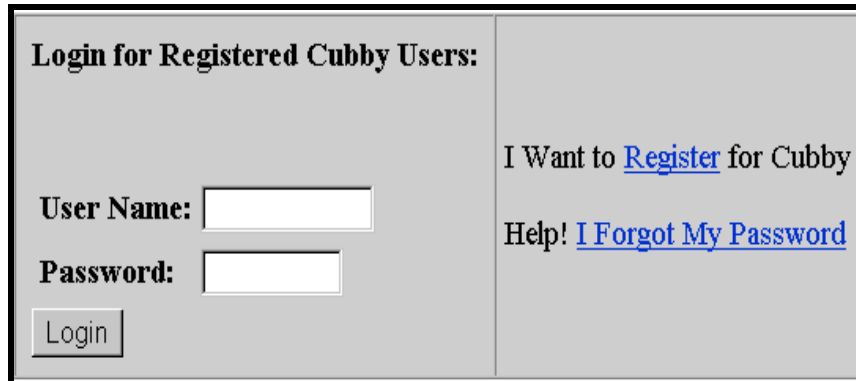
Cubby Sidebar



- Stored Searches provides a link to your Cubby Stored Searches.
- All LinkOut Providers lists each LinkOut provider in alphabetical order.
- Provider Categories lists LinkOut providers organized by subject categories.
- The My LinkOut Preferences page displays the LinkOut preferences you have selected.
- The Change Password page lets you change your password.
- Log Out logs you out of the Cubby. Your login is good for 12 hours, unless you log out.

Registering for the Cubby

- Click Cubby from the PubMed sidebar.
- Then click "I Want to Register for Cubby."



The screenshot shows a web interface for Cubby. On the left, under the heading "Login for Registered Cubby Users:", there are two input fields labeled "User Name:" and "Password:", and a "Login" button below them. On the right, there is a link that says "I Want to [Register](#) for Cubby" and another link below it that says "Help! [I Forgot My Password](#)".

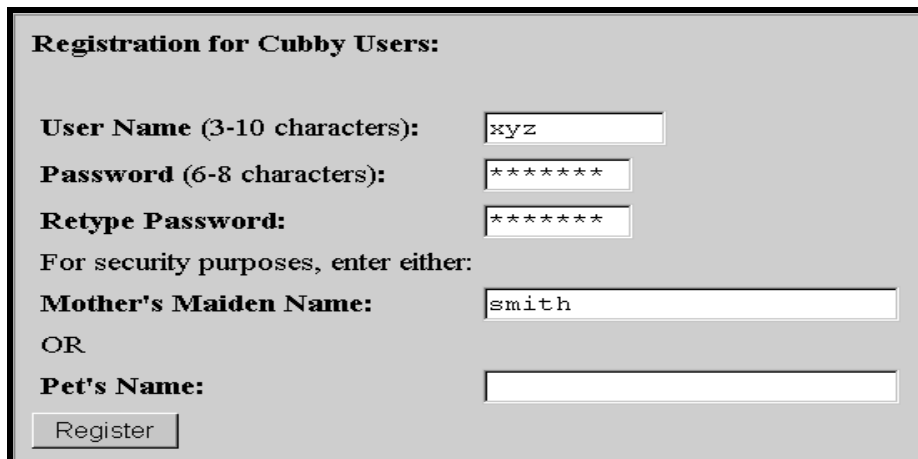
Click on [Register](#) to go to the Cubby Registration screen.

- Provide (make-up) the following information, then click Register:
 1. User Name (3 - 10 characters)
 2. Password (6 - 8 characters)
 3. Mother's Maiden name, or Pet's Name (In the event you forget your password.)



User Name, Password and security word are all case-sensitive. Make sure you enter these in a manner that you can easily remember.

Take Note:



The screenshot shows the "Registration for Cubby Users:" form. It includes input fields for "User Name (3-10 characters):" (containing "xyz"), "Password (6-8 characters):" (containing "*****"), and "Retype Password:" (containing "*****"). Below these is the instruction "For security purposes, enter either:" followed by two options: "Mother's Maiden Name:" (containing "smith") and "OR" and "Pet's Name:" (empty). A "Register" button is at the bottom left of the form.

Enter User Name and Password.

Retype Password.

Enter Mother's Maiden Name or Pet's Name.

Click Register.



Save this information so that you can refer to it later. NLM does not store your User Names or Passwords.

Take Note:

Logging In

You must login to access the Cubby or use Cubby-supported features (e.g., customized LinkOut displays). This login will remain active for 12 hours. If you've already registered, type your User Name and Password and click **Login**.

Enter User Name and Password.
Click Login.

| Login for Registered Cubby Users: | |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------|
| User Name: <input type="text" value="xyz"/> | I Want to Register for Cubby Help! I Forgot My Password |
| Password: <input type="password" value="*****"/> | |
| <input type="button" value="Login"/> | |

Forgot Your Password?

If you've forgotten your password, click "Help! **I Forgot My Password.**"

- In the Password Forgotten box, enter your User Name and click **Lookup**.

Enter your User Name.
Click Lookup.

| Password Forgotten: | |
|----------------------------------------------------|--|
| User Name: <input type="text" value="xyz"/> | |
| <input type="button" value="Lookup"/> | |

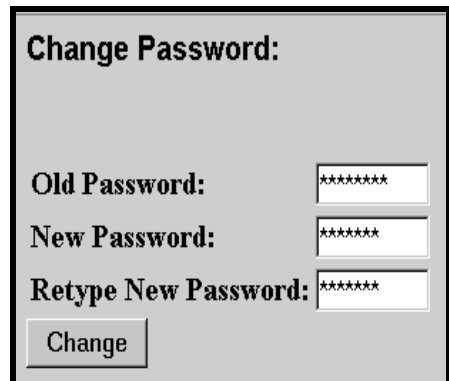
- Enter either your Mother's maiden name or your Pet's name. Click **Check**.
- Once this information is verified, the Cubby assigns you a **new** Password. Make a note of your new Password as you will need it to Login to the Cubby, and you will also need it if you want to change your password to something you can easily remember.

Enter your Answer.
Click Check.

| Check Identity: | |
|---------------------------------------------------|--|
| User Name: xyz | |
| Question: Mother's Maiden Name | |
| Answer: <input type="text" value="smith"/> | |
| <input type="button" value="Check"/> | |

Changing Your Password

Select **Change Password** from the Cubby sidebar and enter your old password and new password, then click Change.



Change Password:

Old Password: *Enter Old Password.*

New Password: *Enter New Password.*

Retype New Password: *Retype New Password.*

Click Change.

Log Out

Click Log Out from the Cubby sidebar to Log Out. Your Login will remain active for 12 hours, unless you Log Out.

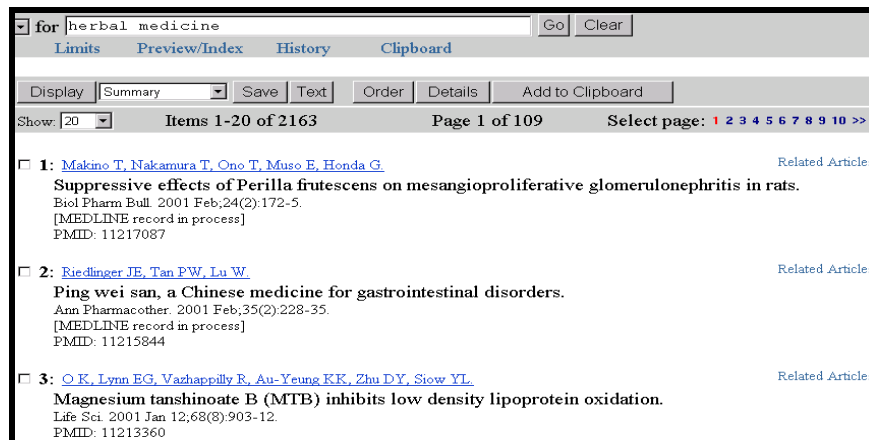
Cubby Stored Searches

Use Cubby to store a new search, see a list of your stored searches, check for new items retrieved by a stored search since you last checked, or delete a stored search.

How to Store a Search

- From anywhere in PubMed, run or Preview your search.
- You can store any search using terms and limits necessary for your topic.

*Enter search
herbal medicine
in Query box.
Click Go.*



Search results for **herbal medicine**. The interface shows a search bar with the query "herbal medicine" and buttons for "Go" and "Clear". Below the search bar are tabs for "Limits", "Preview/Index", "History", and "Clipboard". The results are displayed in a table with columns for "Display", "Summary", "Save", "Text", "Order", "Details", and "Add to Clipboard". The results are sorted by "Summary" and show items 1-20 of 2163. The first three results are listed:

- 1:** [Makino T, Nakamura T, Ono T, Muso E, Honda G.](#) [Related Articles](#)
Suppressive effects of Perilla frutescens on mesangioproliferative glomerulonephritis in rats.
Biol Pharm Bull. 2001 Feb;24(2):172-5.
[MEDLINE record in process]
PMID: 11217087
- 2:** [Riedinger JE, Tan PW, Lu W.](#) [Related Articles](#)
Ping wei san, a Chinese medicine for gastrointestinal disorders.
Ann Pharmacother. 2001 Feb;35(2):228-35.
[MEDLINE record in process]
PMID: 11215844
- 3:** [O K, Lynn EG, Vazhappilly R, Au-Yeung KK, Zhu DY, Siow YL.](#) [Related Articles](#)
Magnesium tanshinolate B (MTB) inhibits low density lipoprotein oxidation.
Life Sci. 2001 Jan 12;68(8):903-12.
PMID: 11213360

- Click Cubby on the sidebar.
- Last Search displays the last search query, including limits, if used.
- Edit the name of the search to something manageable yet meaningful, if necessary.

Last Search
displays your last
query, herbal
medicine.

Edit the Cubby
Search Name, if
necessary.

Click Store in
Cubby.

Previously stored
searches.

Last Search

- Edit the Cubby Search Name below to change the name of the search, click Store In Cubby.
- History numbers (e.g., #3) cannot be used in Stored Searches.

Search **herbal medicine**

Cubby Search Name:

Dr. Brown's Herbal Medicine Search

Store In Cubby

Cubby Stored Searches

- To see new items, select searches and click What's New for Selected.
- Click the Cubby Search Name to display information about the stored search.

| Search | Cubby Search Name | Date and Time |
|-----------------------------|--------------------------------|----------------------|
| <input type="checkbox"/> 1: | arthritis pain | 12-Sep-2000 11:21:58 |

What's New for Selected

Delete Selected Searches

☐ Select/Deselect All



Take Note:

You can store up to 100 searches in a single Cubby account. You can have as many Cubby accounts as you need.



Take Note:

The Cubby will let you store multiple searches with the identical name. Be sure to name each of your Cubby stored searches uniquely.



Search Tip:

Links to "Related Articles" and History numbers (e.g., #3) cannot be stored as part of Cubby Stored Searches. Also, dates or date ranges are not recommended in your strategies. See the What's New Strategy (discussed later in this workbook) for more information on date ranges.

Stored Search Information

- Stored searches are numbered and listed in descending order according to the date and time they were originally stored.
- To review information about a stored search, click on the search name.

*Click on a
Cubby Search
Name to see
search
information.*

| Cubby Stored Searches | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------|
| <ul style="list-style-type: none">• To see new items, select searches and click What's New for Selected.• Click the Cubby Search Name to display information about the stored search. | | |
| Search | Cubby Search Name | Date and Time |
| <input type="checkbox"/> 2: | Dr. Brown's Herbal Medicine Search | 14-Sep-2000 10:56:57 |
| <input type="checkbox"/> 1: | arthritis pain | 12-Sep-2000 11:21:58 |
| <input type="button" value="What's New for Selected"/> | | <input type="button" value="Delete Selected Searches"/> |
| <input type="checkbox"/> Select/Deselect All | | |

- Stored Search Information includes the search name, date and time last updated, database searched, search terms, as well as fields and limits when applicable.
- Click the **Search** button to run the search without update limits. This will not change the date and time the search was last updated.

| Stored Search Information |
|------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Click Search to run this search without updating it or the search date and time. |
| Name: arthritis pain |
| Date and Time search last updated: 12-Sep-2000 11:21:58 |
| Database: PubMed |
| Search: arthritis pain |
| Field: All Fields |
| <input type="button" value="Search"/> |

Updating Cubby Stored Searches

It is easy to check for new items since your last update.

- Select the stored search(es) you want to update by clicking the check box(es) next to the Cubby Search Name.
- To select all searches click the "Select/Deselect All" check box.
- Click "What's New for Selected."

Select *arthritis pain* search.

Click *What's New for Selected*.

| Cubby Stored Searches | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|
| <ul style="list-style-type: none"> • To see new items, select searches and click What's New for Selected. • Click the Cubby Search Name to display information about the stored search. | | |
| Search | Cubby Search Name | Date and Time |
| <input type="checkbox"/> 2: | Dr. Brown's Herbal Medicine Search | 14-Sep-2000 10:56:57 |
| <input checked="" type="checkbox"/> 1: | arthritis pain | 12-Sep-2000 11:21:58 |
| What's New for Selected | | Delete Selected Searches |
| <input type="checkbox"/> Select/Deselect All | | |

- The Cubby displays the list of searches you selected along with an additional column indicating the number of new items retrieved since the last time you checked.
- If there are no new items, the Cubby displays "0 new."
- Click [# new](#) to link to the new items.
- Clicking on this link displays the new items, and updates the stored search in the Cubby with the new date and time.
- If you do not click [# new](#), the search, date, and time are not updated.

| Cubby Stored Searches | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------|-----------------------|
| <ul style="list-style-type: none"> • Click new for latest results and to update Cubby Stored Search date and time. • Click the Cubby Search Name to display information about the stored search. | | | |
| Search | Cubby Search Name | Date and Time | What's New |
| <input type="checkbox"/> 1: | arthritis pain | 12-Sep-2000 11:21:58 | 2 new |
| Delete Selected Searches | | | |

Click on [2 new](#) to link to the new items and update the stored search date and time.

**Take Note:**

The Details button will not display on the results screen after updating a Cubby stored search. This is because the update strategy for your search actually incorporates three separate strategies and Details can only display a single strategy at a time.

**Take Note:**

This information is also available in the PubMed's Help.

Deleting Stored Searches

Select the stored search by clicking the check box next to the Cubby Search Name, and click "Delete Selected Searches." You can select and delete multiple searches at one time.

LinkOut Preferences

- LinkOut is a service that provides links from items retrieved from Entrez databases to information providers.
- In PubMed, the link to the citation provider displays on the Abstract or Citation display formats, when available. The citation provider is the provider, usually the publisher, who submits the citation to NLM electronically.
- All other links to providers from a retrieved item display on the LinkOut display page.
- Use Cubby LinkOut Preferences to customize which links display.
- Whenever you login to the Cubby, PubMed will display LinkOut providers according to your specifications.

Setting your Preferences

You can change how provider links are displayed either by adding an Icon or Hiding a link from LinkOut.

- **Add Icon:** Use the Add Icon option to display links (as icons) to providers' web sites on the fuller PubMed display formats (e.g., Abstract, Citation). The default is for only the citation provider icons to be display with these formats.
- **Hide from LinkOut:** Use the Hide from LinkOut option to hide links to providers' web sites on the LinkOut display format. The default is for all the providers' links to display on the LinkOut display format.

The next few pages will show you how to set your LinkOut preferences. We will demonstrate how to set LinkOut preferences using **Provider Categories** available from the Cubby sidebar. You can also set your preferences using **All LinkOut Providers** and **My LinkOut Preferences** using the same procedures explained below.



Take Note:

Your LinkOut preferences are only in effect when you are logged into the Cubby. Your login will remain active for 12 hours unless you log out of Cubby.

To add an icon to the fuller PubMed display formats, choose, for example, **Provider Categories** from the Cubby sidebar.

- **Provider Categories** lists the categories (e.g., LITERATURE, MEDICAL, MOLECULAR BIOLOGY DATABASES) of LinkOut providers. Within each category are Subject Types. For the LITERATURE category, the Subject Types are aggregators, document delivery, libraries, and publishers/providers.
- You can choose to display (or hide) all the providers in a subject type.

Current LinkOut
Provider Categories
include
LITERATURE,
MEDICAL,
MOLECULAR
BIOLOGY
DATABASES, and
RESEARCH
MATERIALS.

Click on *libraries* to
see the providers
under this category.

All LinkOut Provider Categories

- All [LinkOut](#) Providers are displayed unless hidden. Go to [Help](#) for more information.
- Click on the Add Icon check box to add a LinkOut provider to the fuller display (e.g., Abstract, GenBank). You may add/hide by category or individual provider.

| Add Icon | Hide from LinkOut | Category of Provider |
|--------------------------|--------------------------|----------------------------------------------------|
| | | LITERATURE |
| <input type="checkbox"/> | <input type="checkbox"/> | aggregators (2) |
| <input type="checkbox"/> | <input type="checkbox"/> | document delivery (1) |
| <input type="checkbox"/> | <input type="checkbox"/> | libraries (13) |
| <input type="checkbox"/> | <input type="checkbox"/> | publishers/providers (70) |
| | | MEDICAL |
| <input type="checkbox"/> | <input type="checkbox"/> | consumer health (3) |
| | | MOLECULAR BIOLOGY DATABASES |
| <input type="checkbox"/> | <input type="checkbox"/> | DNA/protein sequence (1) |
| <input type="checkbox"/> | <input type="checkbox"/> | gene/protein/disease-specific (22) |
| <input type="checkbox"/> | <input type="checkbox"/> | mapping (1) |
| <input type="checkbox"/> | <input type="checkbox"/> | organism-specific (3) |
| <input type="checkbox"/> | <input type="checkbox"/> | population/variation (2) |
| <input type="checkbox"/> | <input type="checkbox"/> | taxonomy/phylogenetic (1) |
| | | RESEARCH MATERIALS |
| <input type="checkbox"/> | <input type="checkbox"/> | clones/clone libraries (1) |
| <input type="checkbox"/> | <input type="checkbox"/> | other reagents (1) |

Update LinkOut Preferences

- Alternatively, you can view the individual providers in a subject type by clicking on the subject type name.
- Click on **libraries** under LITERATURE to see the providers under this subject type.
- Select Add Icon for the NIH Library. Click **Update LinkOut Preferences**.

Displays the current list of Library LinkOut providers.

Select **Add Icon** for the NIH Library.


Click **Update LinkOut Preferences**.

| Add Icon | Hide from LinkOut | Individual Provider |
|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Houston Academy of Medicine-Texas Medical Center Library (hamtmc) |
| <input type="checkbox"/> | <input type="checkbox"/> | Johns Hopkins University - Welch Medical Library (jhumlib) |
| <input type="checkbox"/> | <input type="checkbox"/> | Lane Medical Library, Stanford University (Stanford) |
| <input type="checkbox"/> | <input type="checkbox"/> | LinkOutTest Library (libtest) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | NIH Library (NIH) |
| <input type="checkbox"/> | <input type="checkbox"/> | Oregon Research Institute (orilib) |
| <input type="checkbox"/> | <input type="checkbox"/> | Percy Howe Library, The Forsyth Institute (forsythlib) |
| <input type="checkbox"/> | <input type="checkbox"/> | University of Connecticut / Health Center / L.M. Stowe Library (uchclib) |
| <input type="checkbox"/> | <input type="checkbox"/> | University of North Carolina at Chapel Hill (uncchlib) |
| <input type="checkbox"/> | <input type="checkbox"/> | University of South Alabama - Charles M. Baugh Biomedical Library (usalib) |
| <input type="checkbox"/> | <input type="checkbox"/> | University of Washington (UW) (UW) |
| <input type="checkbox"/> | <input type="checkbox"/> | US EPA Library - Research Triangle Park, NC (epartplib) |
| <input type="checkbox"/> | <input type="checkbox"/> | Vanderbilt University - Eskind Biomedical Library (vandylib) |
| Update LinkOut Preferences | | |

Here is an example citation showing the NIH Library icon (in addition to the default citation provider icon) on the Abstract display format of a selected citation.

☐ 1: *Science* 2000 Aug 11;289(5481):938-41
 [Related Articles, Books, LinkOut](#)

Full text article at www.sciencemag.org

Full text provided by 

O₂ activation by nonheme iron complexes: A monomeric Fe(III)-Oxo complex derived from O₂.

MacBeth CE, Golombek AP, Young VG, Yang C, Kuczera K, Hendrich MP, Borovik AS

Department of Chemistry, University of Kansas, Lawrence, KS 66045, USA.

Iron species with terminal oxo ligands are implicated as key intermediates in several synthetic and biochemical catalytic cycles. However, there is a dearth of structural information regarding these types of complexes because their instability has precluded isolation under ambient conditions. The isolation and structural characterization of an iron(III) complex with a terminal oxo ligand, derived directly from dioxygen (O₂), is reported. A stable structure resulted from placing the oxoiron unit within a synthetic cavity lined with hydrogen-bonding groups. The cavity creates a microenvironment around the iron center that aids in regulating O₂ activation and stabilizing the oxoiron unit. These cavities share properties with the active sites of metalloproteins, where function is correlated strongly with site structure.

PMID: 10937994

All LinkOut Providers

Click on **All LinkOut Providers** from the Cubby sidebar to see all the LinkOut providers in alphabetical order.

- Click the Add Icon check box if you want an icon for that provider to show up on the fuller display formats.
- Click the Hide from LinkOut check box if you want to remove the link for that provider on the LinkOut display format.
- Clicking on a box that has a check in it removes the check and deselects that option.
- Click **Update LinkOut Preferences** (at the top and bottom of the screen) to save any changes.
- Click **View** (at the top of the screen) to display new LinkOut providers since the last time you checked by clicking the View button.

My LinkOut Preferences

Click on **My LinkOut Preferences** from the Cubby sidebar to see how your LinkOut Preferences are set.

- Click **Update LinkOut Preferences** to save any changes.
- Click **View** to display new LinkOut providers since the last time you checked.

*Click the **View** button to see new providers.*

The NIH Library Add Icon selection is shown.

My LinkOut Provider Categories

- All [LinkOut](#) Providers are displayed unless hidden. Go to [Help](#) for more information.
- Click on the Add Icon check box to add a LinkOut provider to the fuller display (e.g., Abstract, GenBank). You may add/hide by category or individual provider.

Add Hide from
Icon LinkOut

Category of Provider

Update LinkOut Preferences

My LinkOut Preferences

- All [LinkOut](#) Providers are displayed unless hidden. Go to [Help](#) for more information.
- Click on the Add Icon check box to add a LinkOut provider to the fuller display (e.g., Abstract, GenBank).

Add Hide from
Icon LinkOut

Individual Provider

☒ ☐ [NIH Library \(NIH\)](#)

Update LinkOut Preferences

New providers since the last time I clicked View:

View

LinkOut Preference Tips:

- ✓ When you select preferences from a list, the selection will not be reflected in other provider lists. For example, if you chose to hide all library LinkOut providers, there will not be a check in the Hide check box for all the libraries on the All Providers list even though they will be hidden. Always use My LinkOut Preferences to see how your preferences are set.
- ✓ The category and individual providers are in separate sections on the My LinkOut Preferences page. If you make changes on the My LinkOut Preferences page, be sure to click **Update LinkOut Preferences** for that specific section.
- ✓ Your LinkOut preferences are in effect only when you are logged into the Cubby. Your Login will remain active for 12 hours.

NOTES

Search Field Descriptions

**Take Note:**

Although this workbook provides instruction for using all search field abbreviations and practice exercises, only the sections on **Search Rules and Syntax**, **Search Field Abbreviations**, **MeSH headings [MH]**, and **Subheadings [SH]** are discussed during class time. Practice exercises are not done during class time.

- If you prefer not to use the pull-down menus to select search fields, you may enter a Boolean search statement directly in the query box when building your search.

Search Rules and Syntax

- The Boolean operators AND, OR, NOT *must* be entered in uppercase letters.
- Boolean connectors are processed left to right.
- Nesting of search terms is possible. To change the order in which terms are processed, enclose the concept(s) with parentheses. The terms inside the set of parentheses will be processed as a unit and then incorporated into the overall strategy. **This is called nesting.**

Example: shoulder joint [mh] AND (baseball [mh] OR hockey [mh]) AND arthroscopy [mh]

Search Field Abbreviations

- Terms may be qualified using PubMed's search field tags. A list of the available field names, abbreviations, and brief field descriptions may be found in the PubMed Help under Search Field Descriptions and Tags.
- Each search term should be followed with the appropriate search field tag which indicates which field will be searched. The search field tag must follow the term -- you cannot prequalify.

Correct entry: aromatherapy [mh]

Incorrect entry: [mh] aromatherapy

- Search field tags must be enclosed in **square brackets**.
- Case and space do not matter: ice [mh] = Ice [mh] = ICE [MH]

MeSH headings [MH]

- MeSH headings are qualified using the search field tags:

[mh] to search a MeSH heading

[majr] to search a MeSH heading which is a major topic of an article

- PubMed **automatically** searches the MeSH headings as well as the more specific terms underneath that heading in the MeSH hierarchy; i.e., **the term is exploded**.
- Turning off automatic explosion** of MeSH headings:

Use one of the following tags: [mh:noexp] or [majr:noexp]

Example: thromboembolism [mh:noexp]
thromboembolism [majr:noexp]



Search Tip:

Alternatively, consider using the Do not explode selection from the Detailed Display in the MeSH Browser:

Thromboembolism [\[Brief display\]](#)

Obstruction of a vessel by a blood clot that has been transported from a distant site by the blood stream.

this term/subheadings to the Search using operator:

☐ blood ☐ chemically induced ☐ classification ☐ complications ☐ congenital ☐ diagnosis
☐ drug therapy ☐ economics ☐ enzymology ☐ epidemiology ☐ ethnology ☐ etiology
☐ genetics ☐ history ☐ immunology ☐ metabolism ☐ microbiology ☐ mortality ☐ nursing
☐ pathology ☐ physiopathology ☐ prevention and control ☐ psychology ☐ radiography
☐ radionuclide imaging ☐ radiotherapy ☐ rehabilitation ☐ surgery ☐ therapy
☐ ultrasonography ☐ urine ☐ veterinary

☐ Restrict Search to Major Topic headings only
☒ Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

Click here.



Take Note:

Searching with MeSH headings will exclude PREMEDLINE and publisher-supplied citations as they are not indexed with MeSH.

Subheadings [SH]

- You can directly attach subheadings to MeSH headings using the format MeSH heading/subheading.
- Two letter abbreviations for subheadings or the full subheading name may be used.

Examples:

thromboembolism/pc [mh]
thromboembolism/prevention and control [mh]
toes/in [majr]
toes/injuries [majr]

- Only one subheading may be directly attached to a MeSH heading at a time. If you wish to attach multiple subheadings you must combine them with the OR connector or use the MeSH Browser:

thromboembolism/pc [majr] OR thromboembolism/di [majr]

- For a MeSH/subheading combination, PubMed always explodes the MeSH term and also explodes the subheading if it is explodable. In the example below, the explodable subheading (therapy) or one of its indentions (e.g., diet therapy) will be directly attached to the MeSH term (hypertension) or one of its indentions (hypertension, malignant).

Example: hypertension/th

Hypertension with its indentions:

Hypertension

Hypertension, Malignant

Hypertension, Portal

Esophageal and Gastric Varices

Hypertension, Pulmonary

Persistent Fetal Circulation Syndrome

Hypertension, Renal

Hypertension, Renovascular

Nephrosclerosis

Therapy subheading and its indentions:

therapy

diet therapy

drug therapy

nursing

prevention & control

radiotherapy

rehabilitation

surgery

transplantation

Sample of citation results:

Platelet eicosanoids and the effect of captopril in blood pressure regulation.

MeSH Terms:

- Angiotensin-Converting Enzyme Inhibitors/pharmacology*
- Animal
- Antihypertensive Agents/pharmacology*
- Arachidonic Acid/metabolism
- Blood Platelets/metabolism
- Blood Platelets/drug effects*
- Blood Pressure/drug effects*
- Captopril/pharmacology*
- Comparative Study
- Eicosanoids/metabolism*
- Fatty Acids, Unsaturated/metabolism
- Fatty Acids, Unsaturated/biosynthesis
- Hypertension/drug therapy
- Lipooxygenase/metabolism
- Male
- Prostaglandin D2/biosynthesis
- Prostaglandin-Endoperoxide Synthase/metabolism
- Rats
- Rats, Inbred SHR
- Rats, Wistar
- Support, Non-U.S. Gov't
- Thromboxanes/biosynthesis



Hypertension in pregnancy.

MeSH Terms:

- Antihypertensive Agents/therapeutic use
- Chronic Disease
- Endothelium, Vascular/metabolism
- Female
- Human
- Hypertension/therapy*
- Hypertension/physiopathology
- Hypertension/etiology
- Hypertension/diagnosis
- Kidney Diseases/diagnosis
- Kidney Diseases/complications
- Male
- Pre-Eclampsia/physiopathology
- Pre-Eclampsia/etiology
- Pre-Eclampsia/diagnosis
- Pregnancy
- Pregnancy Complications, Cardiovascular/therapy*
- Pregnancy Complications, Cardiovascular/physiopathology
- Pregnancy Complications, Cardiovascular/etiology
- Pregnancy Complications, Cardiovascular/diagnosis
- Pregnancy Outcome



Salt: blood pressure, the kidney, and other harmful effects.

MeSH Terms:

- Animal
- Blood Pressure/drug effects*
- Comparative Study
- Diet, Sodium-Restricted
- Disease Progression
- Human
- Hypertension, Renal/metabolism
- Hypertension, Renal/etiology*
- Hypertension, Renal/diet therapy
- Rats
- Sodium Chloride/urine
- Sodium Chloride/blood
- Sodium, Dietary/adverse effects*



A list of the current subheadings and subheading explosions appears in PubMed's online Help (under References, see Subheadings and Families of Subheading Explosions) as well as in Section B (MeSH Vocabulary) of this workbook.

Take Note:

To **turn off both** the MeSH heading explosion and subheading explosion, you would enter:

hypertension/th [mh:noexp]

Search Tip:

This turns off the explosion in **both** parts, searching for only the subheading therapy attached directly to only the MeSH term hypertension.

- You may also choose to “free-float” a subheading with a MeSH heading using the Boolean AND and the subheading field tag of [sh]. This is typically done if you wish to directly attach a subheading with a MeSH heading that is not an approved combination.

Example:

breast neoplasms [mh] AND trends [sh]

- To **turn off the subheading automatic explosion**, use the tag [sh:noexp]. You may *only* do this when “free-floating” a subheading.

Truncation Symbol

- The asterisk (*) is the truncation symbol.

**Search Tip:**

There is no single character truncation symbol in PubMed.

Text Words [TW]

- Terms that are qualified with the Text Words [tw] field tag will be searched for in the following fields:
 - Title
 - Abstract
 - Numbers from the Title and Abstract
 - MeSH headings and Subheading
(also fragments and phrases from these 2 fields)
 - Chemical Names of Substances
 - Secondary Source Identifier (The SI field identifies other data sources, databanks and accession numbers of molecular sequences discussed in MEDLINE articles.)
 - Personal Name as Subject

Title Word Searching [TI]

- Enter significant terms (numbers, too) from the title of an article.
- Each word must be followed by the [TI] search field tag.
- Words should be combined with the AND operator.

Example: I'm looking for an article. The title is "Memory improvement following cardiac transplantation".

Query box: memory [ti] AND improvement [ti] AND cardiac [ti] AND transplantation [ti]

Details:

PubMed Query:

```
((memory[ti] AND improvement[ti]) AND cardiac[ti] AND transplantation[ti])
```

Search URL

Result:

[1](#)

Database:

PubMed

User Query:

memory[ti] AND improvement[ti] AND cardiac[ti] AND transplantation[ti]

Result:

| | |
|-----------------------------------------------------------------------------------------------------------|----------------------------------|
| <input type="checkbox"/> 1: Roman DD, Kubo SH, Ormaza S, Francis GS, Bank AJ, Shumway SJ. | Related Articles |
| Memory improvement following cardiac transplantation. | |
| J Clin Exp Neuropsychol. 1997 Oct;19(5):692-7. | |
| PMID: 9408799 | |



Search Tip:

Alternatively, consider using the Title Word selection from the Fields pull-down menu in Limits. When using this method, you do not have to tag each title word.

Example:

for memory AND improvement AND cardiac AND transp Go Clear

Limits Preview/Index History Clipboard

- Use All Fields pull-down menu to specify a field
- Boolean operators AND, OR, NOT must be in upper case
- If search fields tags are used enclose in square brackets, e.g., rubella [ti]
- Search [limits](#) may exclude PreMEDLINE and publisher supplied citations

Limited to:

Title Word ☐ only items with abstracts

Publication Types Languages Subsets

Ages Human or Animal Gender

Entrez Date

Publication Date From To

Use the format YYYY/MM/DD, month and day are optional

Author Searching [AU]

- Use Last Name Initials format with the [au] tag. Example: o'brien j [au]
- PubMed automatically truncates the author's name to account for varying initials.

Example:

for o'brien j [au] Go Clear

Limits Preview/Index History Clipboard

Display Brief Save Text Order Add to Clipboard

Show: 20 Items 1-5 of 5

- ☐ 1: [O'Brien J, et al.](#) Investigation of the Alamar Bl...[PMID:10951200]
- ☐ 2: [O'Brien J.](#) Nonsteroidal anti-inflammatory...[PMID:10950025]
- ☐ 3: [O'Brien JG, et al.](#) Effects of tranexamic acid and...[PMID:10921506]
- ☐ 4: [O'Brien JK, et al.](#) Post-coital sperm recovery and...[PMID:10864790]
- ☐ 5: [O'Brien JA, et al.](#) Probing the structure of rotav...[PMID:10799621]

- To turn off automatic truncation of an author's name, surround the author's name with double quotes and use the [au] search tag.

for "O'Brien J"[au] Go Clear

Limits Preview/Index History Clipboard

Display: Brief Save Text Order Add to Clipboard

Show: 20 Items 1-5 of 5

- ☐ 1: [O'Brien J](#). Nonsteroidal anti-inflammatory...[PMID:10950025]
- ☐ 2: [O'Brien J, et al](#). The association between white ...[PMID:10818542]
- ☐ 3: [O'Brien J, et al](#). Breast cancer metastatic to th...[PMID:10783959]
- ☐ 4: [O'Brien J](#). History of breast prostheses....[PMID:10647478]
- ☐ 5: [O'Brien J, et al](#). Severe deep white matter lesio...[PMID:9765166]

Personal Name as Subject [PS]

- Use the [ps] tag to search for citations to articles about a named individual. The name is searched in the same format as for authors.

Example: lincoln a [ps]



The Personal Name as Subject field is *not* available from the Search Field pull-down menu in Limits.

Take Note:

Example:

for lincoln a [ps] Go Clear

Limits Preview/Index History Clipboard

Display: Summary Save Text Order Details Add to Clipboard

Show: 20 Items 1-20 of 42 Page 1 of 3 Select page: 1 2 3

- ☐ 1: [Freidman WA, Peace D](#). [Related Articles](#)
A gunshot wound to the head--the case of Abraham Lincoln.
Surg Neurol. 2000 May;53(5):511-5. No abstract available.
PMID: 10905932
- ☐ 2: [Stembach GL, Varon J, Fromm RE](#). [Related Articles](#)
Charles Augustus Leale and the resuscitation of Abraham Lincoln.
Resuscitation. 2000 Jun;45(1):3-5. No abstract available.
PMID: 10838233
- ☐ 3: [Alexander LL, Atkins NM](#). [Related Articles](#)
Lincoln's last legacy: a narrative of the president's obscured autopsy instruments.
J Natl Med Assoc. 1998 Jun;90(6):378-81. No abstract available.
PMID: 9640910

Journal Name [TA]

- Search by full journal name, MEDLINE abbreviation, or ISSN.

Examples: Journal of Biological Chemistry [ta]
 J Biol Chem [ta]
 0021-9258 [ta]

**Search Tip:**

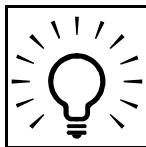
Any single-word journal title or MEDLINE journal title abbreviation should be qualified with [ta].

Languages [LA]

- First three letters of language may be used as abbreviation when searching.
(There are a few exceptions. Example: JPN for Japanese)

Language values may also be spelled out.

Examples: common cold [mh] AND chi [la]
 common cold [mh] AND chinese [la]
 common cold [mh] AND por [la]
 common cold [mh] AND portugese [la]

**Search Tip:**

Remember, the following languages are available from the Languages pull-down menu in Limits:



Entrez Date [EDAT]

- The Entrez Date field contains the date that a record was initially added to PubMed, in the format yyyy/mm/dd [edat], e.g.,

1999/07/10 [edat]

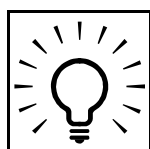
- Month and day are optional:

1999 [edat]

1999/07 [edat]

**Take Note:**

Be aware that the Entrez Date will remain unchanged and is not updated to reflect the date a Publisher Supplied record is elevated to PREMEDLINE or when a PREMEDLINE record is elevated to MEDLINE.

**Search Tip:**

Remember the Entrez Date pull-down menus in Limits.

Publication Date [DP]

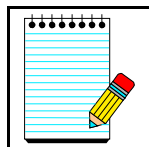
- The date that the article was published in the format of YYYY/MM/DD [dp]. Use the [dp] tag.

1984/10/06 [dp]

- Month and day are optional:

1984/10 [dp]

1984 [dp]

**Take Note:**

Publication Date formats are not standardized from journal to journal.

Ranging

- The colon (:) is used between ranging values.
- To search on Publication Date from 1993 to 1997, enter:

1993:1997 [dp]

- To search on a date, use the format YYYY/MM/DD

Example 1: Search on citations entered into PubMed from Jan 16, 1998 to Feb 13, 1998

1998/01/16:1998/02/13 [edat] where edat is the abbreviation for Entrez Date

Example 2: Search on citations entered into PubMed in January or February 1998

1998/01:1998/02 [edat]



Search Tip:

Remember the Publication Date fill-in-the-blank selection in Limits.

Publication Type [PT]

- Describes the type of material the article represents
- Examples: Twin Study, News, Review, Clinical Trial, Retracted Publication, Letter
- Use the [pt] tag

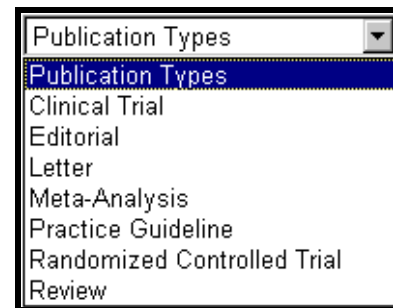
Example: vascular diseases [majr] AND twin study [pt]

**Take Note:**

PubMed's Help includes a listing of all available Publication Types.

**Search Tip:** .

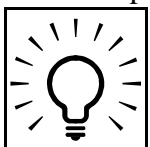
Remember, the following **Publication Types** are available from the pull-down menu in Limits:

**Subset [SB]**

- Allows you to limit your search to a particular portion of PubMed
- Available values include:

| | | |
|------------------------|-------------|-----------------|
| MEDLINE | searched as | MEDLINE [sb] |
| PREMEDLINE | searched as | premedline [sb] |
| PUBLISHER-supplied | searched as | publisher [sb] |
| AIDS | searched as | aids [sb] |
| Toxicology | searched as | tox [sb] |
| Complimentary Medicine | searched as | cam [sb] |

- Use the [sb] tag
- Example: hospice care AND aids [sb]

**Search Tip:**

Remember, you may use the **Subset** pull-down menu from Limits.

Limiting to published journal indexes

- The following values are available:

| | |
|-------------------------------|------------|
| <i>Abridged Index Medicus</i> | jsubsetaim |
| Dental | jsubsetd |
| Nursing | jsubsetn |



Do **not** use a field qualifier; just use the search value.

Search Tip: **Example:** baseball AND jsubsetaim



Remember, you may use the **Subset** pull-down menu from Limits to limit to these values.

Search Tip:

Secondary Source Identifier [SI]

- Identifies a secondary source that supplies information, e.g., other data sources, databanks and accession numbers of molecular sequences.
- The field is composed of a source followed by a slash followed by an accession number.

Example: GENBANK/AF113832 [si]

Use this field also to limit to or exclude the unique HealthSTAR citations in PubMed.

Unique Identifier Searching

- To search for the PubMed Unique Identifier (PMID), **type in the number with or without the search field qualifier [uid]**.

Example: 11073054

- You can search for several unique identifier numbers by entering each number in the query box separated by a space, PubMed will OR the terms together. Do **not** enter the OR connector.

Unique Identifiers as entered in query box.

PubMed finds the 2 citations.



The screenshot shows the PubMed search interface. At the top, a search bar contains the query '7715939 3873270' with 'Go' and 'Clear' buttons. Below the search bar are tabs for 'Limits', 'Preview/Index', 'History', and 'Clipboard'. A row of buttons includes 'Display', a dropdown menu set to 'Summary', 'Save', 'Text', 'Order', 'Details', and 'Add to Clipboard'. Below this, a 'Show:' dropdown is set to '20', and it indicates 'Items 1-2 of 2' and 'One page.'. Two search results are listed, each with a checkbox, a link to the citation, and a link to 'Related Articles'. The first result is for PMID 7715939, titled 'The role of the basal ganglia in nociception and pain.' by Chudler EH, Dong WK. The second result is for PMID 3873270, titled 'Physiological properties of intradental mechanoreceptors.' by Dong WK, Chudler EH, Martin RF.

| Item | Citation | Related Articles |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <input type="checkbox"/> 1: | Chudler EH, Dong WK. The role of the basal ganglia in nociception and pain. Pain. 1995 Jan;60(1):3-38. Review. PMID: 7715939 | Related Articles |
| <input type="checkbox"/> 2: | Dong WK, Chudler EH, Martin RF. Physiological properties of intradental mechanoreceptors. Brain Res. 1985 May 20;334(2):389-95. PMID: 3873270 | Related Articles |

- To search an **Unique Identifier in combination with other terms** you **must** use the search field tag, [uid].

Example:

smith [au] AND (10403340 [uid] OR vaccines [mh]).

Grant Number Searching [AD]

- Grant number information when provided on the article is included in the Author Affiliation or Address field.

Example: LM is the abbreviation used for NLM when grant numbers are assigned. To search for citations to references that indicated that support was from an NLM grant, enter:

lm [ad]

**Search Tip:**

Caution: You may get false hits from other information provided in the Author Affiliation field.

**Take Note:**

PubMed's online Help includes a table listing Grant Abbreviations and Institute Acronyms

Limiting to citations with abstracts:

- Use the value: hasabstract.

**Search Tip:**

Do **not** use a field qualifier; just use the search value.

Example: baseball AND jsubsetaim AND hasabstract

**Search Tip:**

Remember you can use the check box in Limits to restrict to only items with abstracts.

NOTES

Practice Exercises

1. Find references to articles discussing decision-making by nurse practitioners.
2. Find references to articles about Winston Churchill.
3. Find references to articles discussing video display terminals and carpal tunnel syndrome. Use the Related Articles feature to find similar articles. Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)
4. Using the MeSH Browser, find citations to articles about the prevention of chickenpox or measles during pregnancy. Limit to English language articles that have abstracts.

Suggested Answers:

1. Find references to articles discussing decision-making by nurse practitioners.

for #1 AND #2 Preview Go Clear

Limits Preview/Index **History** Clipboard

- Search History will be lost after one hour of inactivity
- To combine searches use # before search number, e.g., #2 AND #6

| Search | Most Recent Queries | Time | Result |
|--------|---------------------------------|----------|-----------------------|
| #2 | Search nurse practitioners [mh] | 09:00:01 | 7676 |
| #1 | Search decision making [mh] | 08:59:47 | 33853 |

2. Find references to articles about Winston Churchill.

churchill w [ps] Go

3. Find references to articles discussing video display terminals and carpal tunnel syndrome. Use the Related Articles feature to find similar articles. Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)

History screen:

for #1 AND #2 Preview Go Clear

Limits Preview/Index **History** Clipboard

- Search History will be lost after one hour of inactivity
- To combine searches use # before search number, e.g., #2 AND #6

| Search | Most Recent Queries | Time | Result |
|--------|-------------------------------------|----------|----------------------|
| #3 | Search #1 AND #2 | 09:06:29 | 10 |
| #2 | Search carpal tunnel syndrome [mh] | 09:06:12 | 3706 |
| #1 | Search video display terminals [mh] | 09:05:54 | 717 |

Limit the list of Related Articles to the publication type, Review. (Hint: Use History.)

Final History screen:

| Search | Most Recent Queries | Time | Result |
|--------|-------------------------------------|----------|----------------------|
| #5 | Search #4 AND review[pt] | 09:09:10 | 12 |
| #4 | Link to PubMed from (10215407) | 09:08:43 | 104 |
| #3 | Search #1 AND #2 | 09:06:29 | 10 |
| #2 | Search carpal tunnel syndrome [mh] | 09:06:12 | 3706 |
| #1 | Search video display terminals [mh] | 09:05:54 | 717 |

4. Using the MeSH Browser, find citations to articles about the prevention of chickenpox or measles during pregnancy. Limit to English language articles that have abstracts.

Detailed Display screen for the MeSH term Chickenpox with the subheading prevention & control selected:

Click on
Add button
to begin to
build your
strategy.

Chickenpox [\[Brief display\]](#)

A highly contagious infectious disease caused by the varicella-zoster virus (HERPESVIRUS 3, HUMAN). It usually affects children, is spread by direct contact or respiratory route via droplet nuclei, and is characterized by the appearance on the skin and mucous membranes of successive crops of typical pruritic vesicular lesions that are easily broken and become scabbed. Chickenpox is relatively benign in children, but may be complicated by pneumonia and encephalitis in adults. (From Dorland, 27th ed)

Add this term/subheadings to the Search using operator: AND

☐ blood ☐ cerebrospinal fluid ☐ chemically induced ☐ classification
☐ complications ☐ congenital ☐ diagnosis ☐ drug therapy ☐ economics
☐ embryology ☐ enzymology ☐ epidemiology ☐ ethnology ☐ etiology ☐ genetics
☐ history ☐ immunology ☐ metabolism ☐ microbiology ☐ mortality ☐ nursing
☐ pathology ☐ physiopathology ☒ prevention and control ☐ psychology
☐ radiography ☐ surgery ☐ therapy ☐ transmission ☐ ultrasonography ☐ urine
☐ veterinary ☐ virology

Next, you look up measles and display the detailed screen. Select the prevention & control subheading:

Select the **OR** operator. Then click on the **Add** button.

Measles [\[Brief display\]](#)

A highly contagious infectious disease caused by MORBILLIVIRUS, common among children but also seen in the nonimmune of any age, in which the virus enters the respiratory tract via droplet nuclei and multiplies in the epithelial cells, spreading throughout the reticuloendothelial system. (From Dorland, 27th ed)

this term/subheadings to the Search using operator:

☐ blood ☐ cerebrospinal fluid ☐ chemically induced ☐ classification
☐ complications ☐ congenital ☐ diagnosis ☐ diet therapy ☐ drug therapy
☐ economics ☐ embryology ☐ enzymology ☐ epidemiology ☐ ethnology
☐ etiology ☐ genetics ☐ history ☐ immunology ☐ isolation and purification
☐ metabolism ☐ microbiology ☐ mortality ☐ nursing ☐ parasitology ☐ pathology
☐ physiopathology ☒ prevention and control ☐ psychology ☐ radiography
☐ surgery ☐ therapy ☐ transmission ☐ urine ☐ veterinary ☐ virology

Next, enter pregnancy. No need to look at the detailed display, so just click on the Add button to AND this term into your search strategy:

Pregnancy [\[Detailed display\]](#)

The condition of having a developing embryo or fetus in the body, after union of an ovum and spermatozoon. (Dorland, 27th ed)

this term to the Search using operator:

Next, click on the **PubMed Search** button from the MeSH Browser screen to run the strategy in PubMed. From the Results screen, click on **Limits**, select **English** from the **Languages** pull-down menu, and select the box next to **only items with abstracts**. Click the **Go** button.

The screenshot shows the PubMed 'Limits' interface. At the top, a search bar contains the text 'chickenpox/prevention and control[MESH] OR me' with 'Go' and 'Clear' buttons. Below the search bar are tabs for 'Limits', 'Preview/Index', 'History', and 'Clipboard'. A list of instructions is provided: 'Use All Fields pull-down menu to specify a field.', 'Boolean operators AND, OR, NOT must be in upper case.', 'If search fields tags are used enclose in square brackets, e.g., rubella [ti].', and 'Search [limits](#) may exclude PreMEDLINE and publisher supplied citations.'

The 'Limited to:' section contains several filters:

- 'All Fields' (pull-down menu)
- ☒ 'only items with abstracts' (checkbox)
- 'Publication Types' (pull-down menu)
- 'English' (pull-down menu)
- 'Subsets' (pull-down menu)
- 'Ages' (pull-down menu)
- 'Human or Animal' (pull-down menu)
- 'Gender' (pull-down menu)
- 'Entrez Date' (pull-down menu)
- 'Publication Date' (pull-down menu) with 'From' and 'To' date pickers.

At the bottom, a note states: 'Use the format YYYY/MM/DD; month and day are optional.'

NOTES

Clinical Queries

This specialized search query is intended for clinicians and has built-in search "filters" based on research done by R. Brian Haynes, M.D., Ph.D. at McMaster University in Canada.

Four study categories or filters are provided:

- therapy
- diagnosis
- etiology
- prognosis

Two emphasis categories or filters are provided:

- sensitivity (also referred to as "recall" -- includes relevant articles but probably including some less relevant; will get more retrieval)
- specificity (also referred to as "precision" -- will get less retrieval)

How to get there

- Click on **Clinical Queries** on the PubMed homepage sidebar to access this search feature.

Clinical Queries Screen:

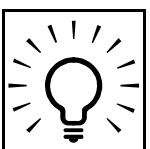
Link to Haynes citation.

Link to details about "filtering."



Take Note:

The **Clinical Queries** page has a link to the Brian Haynes citation and abstract for the article in MEDLINE discussing this research. You can also link to a **Table for Clinical Queries using Research Methodology Filters** that shows a listing of terms using the PubMed and NLM's ELHILL search engines.



Search Tip:

The default filter category is **Therapy**.
The default emphasis is **Specificity**.

Search Example: Gallstones and pain -- using the Clinical Queries defaults of Therapy and Specificity

PubMed

Clinical Queries using Research Methodology Filters

This specialized search is intended for clinicians and has built-in search "filters" based largely upon [Haynes RB et al.](#) Four study categories--therapy, diagnosis, etiology, prognosis--are provided, and you may indicate whether you wish your search to be more sensitive (i.e., include most relevant articles but probably including some less relevant ones) or more specific (i.e. including mostly relevant articles but probably omit a few). See [this table](#) for details regarding filtering.

Indicate the category and emphasis below:

Category: ☒ therapy ☐ diagnosis ☐ etiology ☐ prognosis

Emphasis: ☐ sensitivity ☒ specificity

Enter subject search (do not repeat any of the words above):

NOTE: If you want to retrieve everything on a subject area, you should not use this page. The objective of filtering is to reduce the retrieval to articles that report research conducted with specific methodologies, and retrieval will be greatly reduced.

Search Results using Therapy category and Specificity emphasis:

Show:
Items 1-20 of 40
Page 1 of 2
Select page: [1](#) [2](#)

☐ 1: [Portincasa P, Altomare DF, Moschetta A, Baldassarre G, Di Ciaula A, Venneman NG, Rinaldi M, Vendemiale G, Memeo V, vanBerge-Henegouwen GP, Palasciano G.](#)
The effect of acute oral erythromycin on gallbladder motility and on upper gastrointestinal symptoms in gastrectomized patients with and without gallstones: a randomized, placebo-controlled ultrasonographic study.
Am J Gastroenterol. 2000 Dec;95(12):3444-51.
PMID: 11151875

☐ 2: [Hardt PD, Kress O, Fadgyas T, Doppl W, Schnell-Kretschmer H, Wusten O, Klor HU.](#) [Related Articles](#)
Octreotide in the prevention of pancreatic damage induced by endoscopic sphincterotomy.
Eur J Med Res. 2000 Apr 19;5(4):165-70.
PMID: 10799351

☐ 3: [Schwenk W, Neudecker J, Mall J, Bohm B, Muller JM.](#) [Related Articles](#)
Prospective randomized blinded trial of pulmonary function, pain, and cosmetic results after laparoscopic vs. microlaparoscopic cholecystectomy.
Surg Endosc. 2000 Apr;14(4):345-8.
PMID: 10790552

☐ 4: [Bisgaard T, Klarskov B, Trap R, Kehlet H, Rosenberg J.](#) [Related Articles](#)
Pain after microlaparoscopic cholecystectomy. A randomized double-blind controlled study.
Surg Endosc. 2000 Apr;14(4):340-4.
PMID: 10790551

Repeat the search on gallstones and pain using the category **therapy** and the emphasis **sensitivity**. We should see *higher* retrieval.

Search screen:

Select here.

PubMed

Clinical Queries using Research Methodology Filters

This specialized search is intended for clinicians and has built-in search "filters" based largely upon [Haynes RB et al.](#) Four study categories--therapy, diagnosis, etiology, prognosis--are provided, and you may indicate whether you wish your search to be more sensitive (i.e., include most relevant articles but probably including some less relevant ones) or more specific (i.e. including mostly relevant articles but probably omit a few). See [this table](#) for details regarding filtering.

Indicate the category and emphasis below:

Category: ☒ therapy ☐ diagnosis ☐ etiology ☐ prognosis

Emphasis: ☒ sensitivity ☐ specificity

Enter subject search (do not repeat any of the words above):

NOTE: If you want to retrieve everything on a subject area, you should not use this page. The objective of filtering is to reduce the retrieval to articles that report research conducted with specific methodologies, and retrieval will be greatly reduced.

Search Results using **Therapy** category and **Sensitivity** emphasis:

Show: Items 1-20 of 242 Page 1 of 13 Select page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) >>

- ☐ **1:** [Portincasa P, Altomare DF, Moschetta A, Baldassarre G, Di Ciaula A, Venneman NG, Rinaldi M, Vendemiale G, Memeo V, vanBerge-Henegouwen GP, Palasciano G.](#)
The effect of acute oral erythromycin on gallbladder motility and on upper gastrointestinal symptoms in gastrectomized patients with and without gallstones: a randomized, placebo-controlled ultrasonographic study.
Am J Gastroenterol. 2000 Dec;95(12):3444-51.
PMID: 11151875
- ☐ **2:** [Cheah WK, Lenzi JE, So JB, Kum CK, Goh PM.](#)
Randomized trial of needleoscopic versus laparoscopic cholecystectomy.
Br J Surg. 2001 Jan;88(1):45-7.
PMID: 11136308
- ☐ **3:** [Petroni ML, Jazrawi RP, Pazzi P, Lanzini A, Zuin M, Pigozzi MG, Fracchia M, Galatola G, Alvisi V, Heaton KW, Podda M, Northfield TC.](#)
Ursodeoxycholic acid alone or with chenodeoxycholic acid for dissolution of cholesterol gallstones: a randomized multicentre trial. The British-Italian Gallstone Study group.
Aliment Pharmacol Ther. 2001 Jan;15(1):123-8.
PMID: 11136285
- ☐ **4:** [Lancranjan I, Atkinson AB.](#)
Results of a European multicentre study with Sandostatin LAR in acromegalic patients. Sandostatin LAR Group.
Pituitary. 1999;1(2):105-14.
PMID: 11081188

NOTES

Journal Browser

The PubMed **Journal Browser** allows you to look up information about a journal in both PubMed and PubRef and search for citations from that journal. You can locate a journal using:

- Title
- ISSN (International Standard Serial Number)
- MEDLINE journal title abbreviations

How to get there

- Clicking on the **Journal Browser** link from the PubMed Homepage sidebar takes you to the Journal Browser screen:

Click on **journals with links to publisher Web sites** for a list of full-text journals available on the Web to which PubMed is currently linked. New journals are regularly added.



Take Note:

- Some journals may require that you register, subscribe, or pay a fee in order to view the full-text of an article.
- Contact the journal publishers as noted on their individual Web sites for specific access information.

Journal Browser Screen:

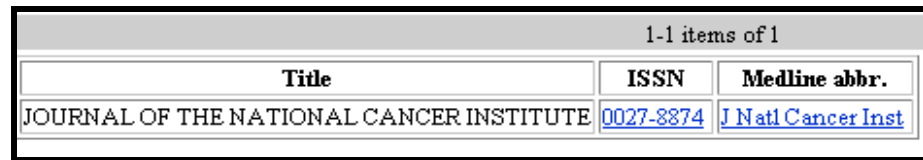
- Enter the journal information.
- Click on **Go** button to run search.

Search example: *Journal of the National Cancer Institute*



| | |
|------------------------------------------|----|
| journal of the national cancer institute | Go |
|------------------------------------------|----|

Search Results:



| 1-1 items of 1 | | |
|------------------------------------------|---------------------------|------------------------------------|
| Title | ISSN | Medline abbr. |
| JOURNAL OF THE NATIONAL CANCER INSTITUTE | 0027-8874 | J Natl Cancer Inst |

- The **MEDLINE abbreviation** link will search PubMed for citations to that journal.
- The **ISSN** link will take you to a commercial journal Web site called PubList.com which provides further information about the journal.

Single Citation Matcher

The **Single Citation Matcher** allows you to find a single citation using bibliographic information such as journal, volume, issue, page number, and publication date.



Search Tip:

The **Single Citation Matcher** can also be used to get a “Table of Contents” listing of items indexed from a particular issue of a journal. Caution: Remember some MEDLINE journals are selectively indexed and there are indexing policies which might mean that not every article from every journal will be in the database.

How to Get There

- Clicking on **Single Citation Matcher** on the PubMed homepage sidebar takes you to the Citation Matcher for Single Articles screen:

Search Example: *Gene Therapy*, 1999, page 271

- Enter as much information as you have. Only one field is required.
- PubMed will inform you if it can't find a match with the information entered.
- Click on the **Search** button.

Citation Matcher for Single Articles

Nucleotide Protein Genome

Enter information about the article you wish to find.

Journal:

Date:

Volume: Issue: First page:

Author's last name and initials (e.g., Smith BJ)

Search Result:

☐ for

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

☐ 1: [Wheeler JJ, Palmer L, Ossanolu M, MacLachlan I, Graham RW, Zhang YP, Hope MJ, Scherrer P, Cullis PR.](#) [Related Articles](#)
Stabilized plasmid-lipid particles: construction and characterization.
Gene Ther. 1999 Feb;6(2):271-81.
PMID: 10435112



Take Note:

The **Batch Citation Matcher** allows you to retrieve the PubMed IDs for many articles all at once. This feature requires that you enter the bibliographic information (journal, volume, page, etc.) in a specific format.

The Batch Citation Matcher is primarily a tool used by publishers to check their electronic submissions and links.

Practice Exercises

Try to find the references using the following information and PubMed's Single Citation Matcher:

1. Arthritis Rheum
1982
page 1271-7

2. R. G. Johnson
Journal of Thoracic and Cardiovascular Surgery
Jan. 1998
page 148

3. V. Lee
Biochemical Pharmacology
vol. 29
issue 14

4. Vojvoda
Lancet
Jan. 6

Suggested Answers:

Try to find the references using the following information and PubMed's Single Citation Matcher:

1. Arthritis Rheum
1982
page 1271-7

Citation Matcher for Single Articles
Enter information about the article you wish to find.
Journal:
Date:
Volume: Issue: First page:
Author's last name and initials (e.g., Smith BJ)

- ☐ 1: [Tan EM, Cohen AS, Fries JF, Masi AT, McShane DJ, Rothfield NF, Schaller JG, Talal N, Winchester RJ](#) [Related Articles](#), [OMIM](#)
The 1982 revised criteria for the classification of systemic lupus erythematosus.
Arthritis Rheum. 1982 Nov;25(11):1271-7.
PMID: 7138600

2. R. G. Johnson
Journal of Thoracic and Cardiovascular Surgery
Jan. 1998
page 148

Citation Matcher for Single Articles
Enter information about the article you wish to find.
Journal:
Date:
Volume: Issue: First page:
Author's last name and initials (e.g., Smith BJ)

- ☐ 1: [Cohn WE, Suen HC, Weintraub RM, Johnson RG](#) [Related Articles](#)
The "H" graft: an alternative approach for performing minimally invasive direct coronary artery bypass.
J Thorac Cardiovasc Surg. 1998 Jan;115(1):148-51.
PMID: 9451058

3. V. Lee
Biochemical Pharmacology
vol. 29
issue 14

Citation Matcher for Single Articles

Enter information about the article you wish to find.

Journal:

Date:

Volume: Issue: First page:

Author's last name and initials (e.g., Smith BJ)

- ☐ 1: [DiCioccio RA, Srivastava BI, Rinehart KL, Lee VJ, Branfman AR, Li LH](#)

[Related Articles](#)

Structure-activity relationship, selectivity and mode of inhibition of terminal deoxyribonucleotidyltransferase by streptolydigin analogs.

Biochem Pharmacol. 1980 Jul 15;29(14):2001-8. No abstract available.

PMID: 6985561

4. Vojvoda
Lancet
Jan. 6

*Without the
publication year,
the month and day
are not helpful.
Fill in the form with
the significant
information you have.*

Citation Matcher for Single Articles

Enter information about the article you wish to find.

Journal:

Date:

Volume: Issue: First page:

Author's last name and initials (e.g., Smith BJ)

- ☐ 1: [Vojvoda D, Grimmell K, Sernyak M, Mazure CM](#)

[Related Articles](#)

Monozygotic twins concordant for response to clozapine.

Lancet. 1996 Jan 6;347(8993):61. No abstract available.

PMID: 8531572

NOTES